



R06-17-A-018

# CITY OF HOUSTON

Public Works and Engineering Department

**Sylvester Turner**

Mayor

Dale A. Rudick, P.E.  
Director  
P.O. Box 2688  
Houston, Texas 77252-2688

[www.houstontx.gov](http://www.houstontx.gov)

December 16, 2016

Ms. Mary Kemp  
US EPA Region 6  
1445 Ross Avenue  
Suite 1200 (6SF-VB)  
Dallas, TX 75202-2733

**Re: City of Houston, Texas FY17 Application for EPA Brownfields Community-Wide Petroleum and Hazardous Substance Assessment Grants**

Dear Ms. Kemp,

On behalf of the City of Houston, I am pleased to submit the enclosed proposal to the U.S. Environmental Protection Agency for a combined \$300,000 petroleum/hazardous substances Brownfields Assessment grant for the redevelopment of Houston's Greater East End. The City of Houston is seeking EPA funding to conduct Phase I and Phase II Environmental Site Assessments and cleanup planning, in addition to community outreach and involvement in, not only the Greater East End target community, but city-wide.

The East End has become a focus of revitalization efforts because of its historical and cultural significance to our City. Focusing brownfields redevelopment efforts in this area is anticipated to improve the quality of life for these residents by remediating environmental contamination and degradation. In addition, the revitalization of this community is also anticipated to improve health and quality of life while increasing employment opportunities for an area in which 12 percent of the population is unemployed and approximately 33 percent of the population live at or below the poverty line. While redevelopment is currently underway, additional assistance is needed to further the revitalization of this community that has been plagued by environmental justice issues for decades.

The City of Houston is providing the following information in association with the enclosed application:

**a. Applicant Identification:**

City of Houston, Public Works and Engineering Department  
Planning and Development Services Division  
Brownfields Redevelopment Program  
1002 Washington  
Houston, Texas 77002  
Telephone: (832) 394-9005  
Fax: (832) 394-8975

- b. **Funding Requested:**
- i. **Grant Type:** Assessment
  - ii. **Assessment Grant Type:** Community-Wide
  - iii. **Federal Funds Requested:** \$300,000 – the City of Houston is not requesting a waiver for site specific proposal
  - iv. **Contamination:** \$200,000 – Hazardous Substances Assessments  
\$100,000 – Petroleum Assessments
- c. **Location** City of Houston, Harris County, Texas
- d. **Site Address** N/A – this is not a site-specific proposal
- e. **Contacts**
- i. **Project Director:** Ms. Jennifer M. Clancey  
Brownfields Redevelopment Program Manager  
1002 Washington, Office 339  
Houston, Texas 77002  
Email: Jennifer.Clancey@houstontx.gov  
Telephone: (832) 394-9005  
Fax: (832) 394-8975
  - ii. **Chief Executive:** Mr. Sylvester Turner  
Mayor, City of Houston  
City Hall – 901 Bagby Street, 3<sup>rd</sup> Floor  
Houston, Texas 77002  
Email: mayor@houstontx.gov  
Telephone: (713) 837-0311
- f. **Population** 2,167,988; City of Houston is not located within a county experiencing persistent poverty
- g. **Regional Priorities Form/Other Factors Checklist:** Attached
- h. **Letter from the State Environmental Authority :** Attached

Thank you for your consideration.

Sincerely,



Jennifer M. Clancey  
Brownfields Redevelopment Program Manager

Attachments:        Regional Priorities Form/Other Factors Checklist  
                             Letter from the State Environmental Authority

## **City of Houston – Proposal for EPA Brownfields Community-Wide Assessment Grants**

### **1. Community Need**

#### **a. Target Area and Brownfields**

i. Community and Target Area Descriptions: The City of Houston, located near the Gulf Coast in southeastern Texas, is the largest city in the state of Texas and the fourth largest city in the United States. Houston is the seat of Harris County, the fifth-largest metropolitan area in the country with a population of nearly 7 million people. The City of Houston was born near the banks of Buffalo Bayou in 1836, making it a burgeoning port city from the very beginning. Since the discovery of oil in Texas in 1901, Houston has been the petrochemical capital of the United States, with several thousand miles of pipeline connecting chemical plants, refineries, salt domes, and fractionation plants along the Texas Gulf Coast. The petrochemical and other local industries, along with the City's proximity to the Gulf of Mexico, have allowed the Port of Houston to become the busiest port in the United States in terms of foreign tonnage and the second busiest in the nation in terms of overall tonnage. This also led to the establishment of several small communities and neighborhoods in the areas near the Port.

The targeted community for this Assessment Grant proposal for the City of Houston's Brownfields Redevelopment Program (BRP) is the Greater East End (East End). The historic East End is approximately sixteen square miles and begins along the eastern edge of Downtown, is bisected by Buffalo Bayou, and extends east to the Port of Houston. This area has become a focus of revitalization efforts because of its historical and cultural significance to the City. The community was originally the site of old Harrisburg, which was an early Texas trading post and the seat of government for the Republic of Texas in 1836. Because of its proximity to the Port of Houston and the accompanying employment opportunities, the East End was once a primary area of relocation for immigrants who were coming here in search of better lives. The area includes two of Houston's oldest Hispanic neighborhoods, Magnolia Park and Second Ward, as well as the Eastwood subdivision, which was established in 1913 and was once the home to many well-known Houstonians. Old Harrisburg was annexed by the City of Houston in 1926 and following the end of World War II, the City began to move and expand westward. This was the beginning of the slow but steady decline of the East End. The East End is now the home of abandoned or underutilized industrial facilities, comprising close to 50% of the geographic area, with residential homes scattered throughout. The abundance of these facilities and their immediate proximity to the predominantly minority citizens living there has led to a community that is suffering from the economic, health, and environmental burdens that have been left behind.

ii. Demographic Information & Indicators of Need: Table 1 provides demographic, health, and economic information for the Greater East End target area in comparison to the City of Houston, the State of Texas, and the United States. The table illustrates that the target area has significantly higher percentages of minority and sensitive populations (including children and elderly), negative health attributes, unemployment, and poverty rates when compared to the City, State, and National averages. In addition, the per capita income in this area is nearly half that of the City, State, and National averages. As these numbers suggest, the community need here is multilayered and very substantial.

*Table 1: Comparative Population, Sensitive Populations & Health Attributes, & Income Demographics*

	<b>Greater East End</b>	<b>City of Houston</b>	<b>State of Texas</b>	<b>United States</b>
<b><i>Comparative Population<sup>1</sup>:</i></b>				
Population	47,341	2,167,988	26,092,033	314,107,084
Percent Minority	94.3%	74.5%	55.7%	37.2%
African American	12.7%	22.8%	11.6%	12.2%
Asian	0.7%	6.3%	4.0%	4.9%
Hispanic	80.4%	43.9%	38.2%	16.9%

White	5.7%	25.5%	44.3%	62.8%
Other	0.5%	1.5%	1.9%	3.2%
<b><i>Sensitive Populations and Health Attributes:</i></b>				
Percent Children (0-14) <sup>1</sup>	36%	26%	28%	24%
Percent Elderly (65+) <sup>1</sup>	10%	1.8%	1.6%	1.3%
Percent Overweight/Obese Adults <sup>2</sup>	66%	63%	32.4%	36.5%
Percent Children at Unhealthy Weight (14+) <sup>2</sup>	55%	34%	19%	17%
Percent Diabetes Diagnosis <sup>3</sup>	12%	11%	10.9%	9.3%
Percent High Blood Pressure Diagnosis <sup>3</sup>	33%	30%	29.5%	29%
Cancer Mortality Rates <sup>4</sup>	184.5	197.6	177.5	183.8
<b><i>Income Demographics<sup>1</sup>:</i></b>				
Unemployment	12.2%	8.9%	7.7%	9.2%
Poverty Rate	33%	22.9%	17.7%	15.6%
Per Capita Income	\$16,618	\$27,938	\$26,513	\$28,555
<sup>1</sup> Data is from the 2014 U.S. Census Bureau, American Community Survey 5-year estimates and is available at <a href="http://www.census.gov">www.census.gov</a> <sup>2</sup> Data is from The State of Obesity in Texas and is available at <a href="http://stateofobesity.org/states/tx/">http://stateofobesity.org/states/tx/</a> <sup>3</sup> Data is from the University of Texas Health Science Center at Houston Health of Houston Survey 2010 and is available at <a href="https://sph.uth.edu/research/centers/ihp/health-of-houston-survey-2010/">https://sph.uth.edu/research/centers/ihp/health-of-houston-survey-2010/</a> <sup>4</sup> Data based on report of Houston Neighborhoods conducted by the City of Houston Health Department in 2003.				

**iii. Brownfields & Their Impacts:** There are many unique, eclectic areas within the City of Houston that have contributed to the success of the City. These unique areas have been able to develop over time largely due to the lack of zoning within the City; however, this lack of zoning is also a contributing factor to the accumulation of brownfields within the East End target area. The heavy industrial nature of this area, combined with the dense residential population and the lack of zoning has created an incompatible situation in which commercial/industrial properties are located in very close proximity to residential homes and, in some cases, directly next door. Environmental Protection Agency (EPA) and Texas Commission on Environmental Quality (TCEQ) databases identify hundreds of sites with environmental impacts ranging from former lead smelters to solid waste disposal facilities to leaking petroleum storage tank sites in the East End target area. These facilities and associated contaminants are not concentrated in one area; rather they are interspersed between approximately 47,000 residents, of which 94% are minorities and 36% are children.

The abundance of brownfields in the East End is a significant road block to its redevelopment. Most of the brownfield sites are former industrial and manufacturing facilities with known or suspected contamination, including total petroleum hydrocarbons (TPH), metals (including lead, arsenic, chromium, and mercury), polychlorinated biphenyls (PCBs), pesticides, volatile and semi-volatile organic compounds (VOCs/SVOCs), and chlorinated VOCs. The known and perceived environmental risk and associated cost of cleanup has especially deterred development by community-based organizations and local government who represent the needs and desires of the current residential population. For this reason, the BRP utilized FY14 Assessment Grant funding to not only determine the nature and extent of contamination associated with brownfields sites, but to empower revitalization initiatives born out of community need and shaped by public participation. Through community engagement and area-wide assessment efforts, discussed in later sections, BRP and its community partners have selected priority sites in need of additional Assessment Grant funding. The priority sites, presented in Table 2, were strategically selected based on their ability to catalyze redevelopment efforts that satisfy community need, including the expansion of city parks, transit-oriented development, renewable energy and sustainable reuse, education, and urban agriculture. Within

these priority sites the transport of chemicals in soil, groundwater, soil vapor, and air, along with the eventual human exposure through vapor intrusion/inhalation, direct contact, airborne particulates, and ingestion, pose a great health risk to a community that has been struggling for environmental justice. Additionally, most of these sites are directly adjacent to Buffalo Bayou, which is a sensitive ecological receptor.

*Table 2: Target Area Priority Sites*

<b>Site Location &amp; Former Use</b>	<b>Assessment Needed</b>	<b>Potential Contaminants of Concern</b>	<b>Health Effects*</b>	<b>Reuse Plan</b>
<b><i>Proler 90 Hirsch Road Houston, TX 77011</i></b> Scrap metal sorting facility	Phase I	TPH, VOC/SVOCs, Metals	neurological, hematological problems, immunological damage	Japhet Creek restoration & flood resiliency project, Buffalo Bayou Park System, Ecosystem restoration
	Phase II			
	Cleanup Planning			
<b><i>5401 Navigation Houston, TX 77011</i></b> Watco Transportation Industrial Facility	Phase II	VOCs/SVOCs, Metals	neurological, hematological problems, immunological damage	Community Space, Arts, & Education
	Cleanup Planning			
<b><i>5803 Navigation Houston, TX 77011</i></b> Watco Transportation Industrial Facility	Phase II	VOCs/SVOCs, Metals	neurological, hematological problems, immunological damage	Buffalo Bayou Parks System, Recreation Trails
	Cleanup Planning			
<b><i>900 78<sup>th</sup> Street Houston, TX 77012</i></b> Former truck refueling	Cleanup Planning	TPH, BTEX, MTBE	neurological, hematological problems, immunological damage	Public Auction (currently tax delinquent)
<b><i>1923 Kolfahl Street Houston, TX 77023</i></b> Former Industrial facility	Cleanup Planning	Chlorinated VOCs	headaches, poor coordination, respiratory problems, liver/kidney damage, nerve damage, cancer	Public Auction (currently tax delinquent)
<b><i>Japhet Creek Community</i></b> Former railroad, dumping, and industrial parcels adjacent to Proler scrap metal yard	Phase I	TPH, SVOCs	neurological, hematological problems, immunological damage	Education center for St. Catherine's Montessori to teach urban agriculture & environmental stewardship
	Phase II			
	Cleanup Planning			
<b><i>6941 Avenue S Houston, TX 77011</i></b> Former valve repair facility	Cleanup Planning	Chlorinated VOCs	headaches, poor coordination, respiratory problems, liver/kidney damage, nerve damage, cancer	HPRD greenways project for connecting existing park system
*Agency for Toxic Substance & Disease Registry (ATSDR), available online at <a href="http://www.atsdr.cdc.gov">www.atsdr.cdc.gov</a>				

## **b. Welfare, Environmental, & Public Health Impacts**

**i. Welfare Impacts:** The welfare of the residents of the East End has been radically impacted by the decline of the area over the past decades. Many of the industries that once provided opportunities, hope, and financial security for the area have relocated, leaving behind a community that has been devastated

by the impacts of the loss of these employment opportunities and the stresses associated with unemployment and underemployment. In addition, the industrial footprint that remains contributes to increased blight, health and safety concerns, and illegal dumping. The University of Texas Health Science Center at Houston *Health of Houston Survey 2010* revealed that 33% of the residents in the target area consider illegal dumping to be of concern, whereas only 17% of the City shares the same concern. In addition, 19% of the residents of the target area consider pollution from chemicals and runoff from commercial/industrial properties to be a problem, when only 10% of the City shares this concern in other areas, and 42% of East End residents consider fumes, smells, and smoke from industry to be of concern in their community, while only 15% of the City have similar concerns. As illustrated in Table 1, this is a community in which the number of residents living at or below the poverty rate is more than double that of the national average and the percentage of unemployed residents is consistently higher than city, state, and national averages. The remnants of industrial facilities create a patchwork of brownfields throughout the East End, lending to accessibility issues in the community. The lack of open public spaces and community interconnectedness, resulting from an insufficient amount of park space and walking and biking pathways, is likely contributing to a community in which the percentage of overweight or obese adults is nearly twice the national average and the percentage of overweight children is nearly three times that of the national average. This may also be contributing to the increased diagnoses of diabetes and high blood pressure, which both exceed city, state, and national averages. In an area that has such concerns, redevelopment and community revitalization will have tremendous impacts on the welfare of residents.

ii. Cumulative Environmental Issues: Numerous industrial facilities have made their homes in the East End community for decades and have made this area both historically significant and a vital part of the local and world economy. However, these facilities may also be contributing to health and environmental justice issues. Houston has been classified as a severe nonattainment area, considered to have air quality worse than the National Ambient Air Quality Standards, for ozone for many years. Additionally, the EPA Environmental Justice and Mapping Tool identifies the East End in the 75<sup>th</sup> percentile or higher for all of the Environmental Justice Indexes when compared to state, regional, and national percentiles, including diesel particulate matter, fine particulate matter (PM 2.5), and others associated with overall air quality (see Appendix E), all of which can contribute to impaired respiratory function. In addition to the priority sites and the associated impacts illustrated in Table 2, EPA and TCEQ databases reveal one National Priorities List site, three Superfund Enterprise Management System sites, 298 Resource Conservation and Recovery Act sites, two former lead smelters, eight solid waste disposal facilities, 261 leaking petroleum storage tank sites, 81 sites with spills reported at or above the reportable quantities, 82 Voluntary Cleanup Program sites, and 60 Corrective Action sites, to name a few, in the target area. These types of facilities may be responsible for air, water, and soil contaminants such as lead and other metals, VOCs and SVOCs, and TPH, and may contribute to neurological, hematological, immunological, cardiovascular, and developmental health impacts, further demonstrating the need for additional investigations and assessments in this area.

iii. Cumulative Public Health Impacts: The East End community is highly urbanized where large numbers of minorities and low income individuals and families live and work. Numerous long-term health and wellness effects are associated with known and suspected contaminants at sites throughout this community. These contaminants, which are discussed above, have known health impacts that include neurological, behavioral, hematological, immunological, and cardiovascular effects, respiratory problems, liver and kidney damage, and both fetal and non-fetal developmental issues. Additionally, the City's Health Department identifies the East End as suffering from the highest toxic air emissions and inhalation cancer risk in the City due to its proximity to many emission sources, which may contribute to a higher incidence of cancer in the City's East End communities when compared to state and national averages (see Table 1). As a result of the petrochemical and industrial activities in Houston, particularly

the East End, the City's Health Department and the Centers for Disease Control funded an 18-month study in 2007 by the University of Texas School of Public Health to identify possible links between cancer risk and hazardous pollutants in the City of Houston. The study identified children living in the eastern most area of Houston's East End as having a 56% higher chance of contracting acute lymphocytic leukemia than children living more than 10-miles from this area. Additionally, the Texas Department of State Health Services published a study in 2015 in which it recognized that higher than expected levels of both childhood and adult cancers were identified in eastern Houston neighborhoods. Additionally, the lack of both public space and community interconnectedness may be contributing to the increased percentages of overweight and obese adults and children, as well as increased diagnoses of diabetes and high blood pressure in the area, as discussed above.

With the proportionately higher percentages of sensitive populations in the East End it is evident that the residents of this community have had to bear the burden of Houston's bustling industrial and petrochemical industry, while not receiving the economic benefits that would typically accompany it. By addressing contamination issues at both hazardous substance and petroleum contaminated sites through assessment and cleanup, as well as partnering with the City's Health Department to address air quality concerns, it is expected that East End residents will experience improved health benefits by having reduced exposure to harmful contaminants, as well as increased public spaces and community connectedness. The assessment, cleanup, and subsequent redevelopment will aid in limiting inhalation, ingestion, and contact exposures, while decreasing blood lead levels in children, asthma hospitalizations, and infant mortality rates..

### **c. Financial Need**

i. Economic Conditions: The City of Houston has faced budget shortfalls ranging from a few million to tens of millions of dollars over the past several years. The impacts within City organizations have been immense and have included employee layoffs, elimination of positions, and closing of city facilities (including parks and community centers). Departmental and programmatic budgets have been drastically reduced to stretch already tight budgets even further. The BRP has been no exception and has no guaranteed funding at this time aside from the current FY14 Petroleum and Hazardous Substance Assessment grants. Coupled with the economic hardships of the City and the BRP, the Oil and Gas Industry, which is the largest contributor to Houston's economy, began to experience an epic economic downturn in December 2014 caused by the rapidly decreasing price of oil. As reported by the Institute for Regional Forecasting at the University of Houston, this has resulted in the loss of nearly 100,000 jobs in the Houston area across many sectors, with approximately 70,000 of those losses in industrial-type jobs related to oil and gas production. These losses have been devastating to areas like the East End, which has an unemployment rate of 12.2%, higher than the local, state, and national averages, as well as a population in which 33% live at or below the poverty limit, nearly three times that of the national average. The loss of City resources and employment opportunities, along with recovery efforts from three major flood events since May 2015, has created an even more tremendous need for brownfields assistance. There is an urgent need for BRP Assessment Grant funding to catalyze redevelopment efforts that will in turn revitalize the East End through job creation, private investment, and growth in the tax base.

ii. Economic Effects of Brownfields: The brownfield sites in the East End, along with the other brownfield sites throughout the City, at one time provided employment opportunities for the community. In addition to their continued environmental degradation, several of these properties have been abandoned and are now tax delinquent, leading to a significantly decreased tax base for the community and City. The City's brownfields inventory includes approximately \$1.8 million of lost resources and nearly \$300,000 of this can be attributed to properties within the East End. The loss of this tax base hinders the City's ability to reinvest in the area and contributes to the ongoing issues of

unemployment and underemployment that plague the East End which has an unemployment rate that is higher than the local, state, and national averages as illustrated in Table 1. Lack of employment or, as is more often the case, underemployment can contribute to issues other than increased financial burden. In an area where one third of the population is living below the poverty limit, the loss of an area employer can have catastrophic financial impacts. Unemployed and underemployed individuals are also typically lacking health insurance or other means of health care. Table 1 illustrates that the East End has a higher percentage of sensitive populations when compared to city, state, and national averages. Because sensitive populations make up nearly 40% of the population in this area, lack of adequate health care can not only have dire repercussions on overall health and wellbeing, it can greatly exacerbate already critical financial situations due to out-of-pocket health care costs. This is yet another reason why revitalization and economic development in the Greater East End area is of the utmost importance.

## **2. Project Description and Feasibility of Success**

### **a. Project Description, Timing, & Implementation**

**i. Project Description & Alignment with Revitalization Plans:** The target area of this assessment grant proposal, the City's Greater East End, has become a focus of City revitalization efforts because of its historical and cultural significance, as well as the concern and determination of community organizations within the area. The BRP has focused attention on the East End since as early as 2010 and recently amplified its contribution to redevelopment efforts using FY14 Assessment Grant funding to establish key partnerships with community organizations, most specifically the Greater East End Management District (GEEMD), Buffalo Bayou Partnership (BBP), Houston Parks and Recreation Department (HPRD), and the Fifth Ward Community Redevelopment Corporation (FWCRC). Each of these organizations has developed master plans for redeveloping the East End based on their unique missions for community improvement. These plans, discussed in more detail in Section 3c, were developed through thoughtful research and extensive public participation efforts, and therefore, best represent the community's vision for revitalization. This vision includes equitable access to parks and recreation trails, pedestrian-friendly street and traffic patterns, access to affordable housing, and the preservation of neighborhood character. Additionally, community need has been clearly defined by demographic information, various health studies, and unemployment/underemployment statistics.

In response to community need and in collaboration with key community partners, BRP launched the Brownfields to Parks Initiative in 2016. The Initiative joins various independent revitalization efforts and leverages the strengths of each partner through the common mission to rid the East End of blight and create a park system that satisfies immediate need for improving the health and wellbeing of the community, as well as incentivizes continued investment and sustainable development. Four of the seven priority sites presented in Table 2 were selected through an area-wide brownfields inventory and prioritization/ranking effort specifically conducted for the Initiative. In addition to these four sites, the brownfields inventory has identified over 600 parcels with potential for redevelopment as parks, recreation trails, or open space.

The BRP has made great strides over recent years in assisting the East End community with their revitalization efforts through community outreach, area-wide inventory of brownfields, Phase I and Phase II assessments, and cleanup planning. Community stakeholders have come to rely on the BRP as an essential resource for redeveloping the many abandoned industrial facilities in the East End due to both the guidance offered by BRP as well as funds from FY14 Assessment Grant that have helped catalyze redevelopment. For instance, in addition to conducting assessments for the Brownfields to Parks initiative, BRP has worked closely with FWCRC to strategize ways of using the existing area-wide brownfield inventory to select eligible properties for potential redevelopment as affordable housing. Another nonprofit, Japhet Creek Civic Association, is also currently engaged with BRP to conduct Phase I assessments on brownfields properties that will be redeveloped by St. Catherine's



Montessori School for an educational facility focused on urban agriculture and environmental stewardship. Continued support of these projects and many others is heavily dependent on BRP's ability to leverage additional EPA Assessment Grant dollars. Furthermore, additional assessment funding will allow BRP to better position projects like those of the Brownfields to Parks Initiative, bayou restoration, and affordable housing projects for other federal grant opportunities, including National Parks Service assistance, U.S. Department of Transportation, and U.S. Housing and Urban Development Department grants, as well as private grants and investments.

The BRP anticipates spending at least 80% of both the hazardous substance and petroleum grants to conduct site assessments and cleanup planning. The BRP also anticipates utilizing a portion of each of the grants to collaborate with community partners to identify catalytic redevelopment opportunities and continue public participation, guided by the Community Relations Plan (CRP) that was developed using FY14 Assessment Grant dollars.

ii. Timing & Implementation: To ensure the BRP is prepared to implement these assessment grants upon receipt of the Cooperative Agreement from the EPA, the competitive contractor selection process and contract development will begin upon verbal notification of award. This will ensure contractors have been selected and contracts are ready for approval by City Council as soon as the Cooperative Agreements are received. Although additional assessment dollars are necessary to complete the East End brownfields inventory, existing sites have been selected and prioritized based on community need. This will ensure sites are available for assessment as soon as funding is received. As sites are approved for assessment by EPA (and TCEQ, if necessary), the BRP will gain access to sites from the current site owners. In the event that site access cannot be gained, for instance if a site is abandoned and a property owner cannot be contacted, a Health, Safety, and Welfare Right of Entry will be obtained. This method is routinely used by both the Health Department and the Department of Neighborhoods when investigating complaints on private property. It has been adopted and successfully used by the BRP while assessing sites that have no known owner as part of the FY14 Assessment Grants.

## **b. Task Descriptions and Budget Tables**

### i. Task Descriptions

**Task 1 – Site Assessments:** Phase I and Phase II Environmental Site Assessments (ESAs) will be conducted by a qualified professional environmental consultant who is awarded a contract based on the City of Houston's competitive selection process. Based on past assessment work, the BRP anticipates the cost of a Phase I to range from \$4,000 to \$6,000 and the cost of a Phase II to range from \$20,000 to \$70,000. With the proposed budget, the BRP plans to conduct 6 hazardous substance Phase I ESAs and 4 hazardous substance Phase II ESAs for an estimated total cost of \$147,000 and 3 petroleum Phase I ESAs and 2 petroleum Phase II ESAs for an estimated total cost of \$63,500.

**Task 2 – Cleanup Planning:** The BRP will conduct cleanup planning for brownfields where redevelopment is imminent. This may include preparation of Affected Property Assessment Reports (APAR), assessment of brownfields cleanup and redevelopment alternatives, and evaluation of institutional and engineering controls. The BRP plans to complete 2 hazardous substance and 2 petroleum cleanup plans at an estimated cost of \$8,000 each, or \$16,000 per grant.

**Task 3 – Community Outreach:** The budget includes \$20,000 from the hazardous substance grant and \$12,500 from the petroleum grant for community outreach. These costs include \$2,000 from hazardous substance and \$1,000 from petroleum for supplies to coordinate and conduct community involvement and outreach meetings, and \$3,000 from hazardous substance and \$1,500 from petroleum grant for supplies to develop, mail and post public notices and any additional costs. In addition, \$15,000 from hazardous substance and \$10,000 from petroleum has been included for contractual costs associated with professional consultant assistance with community outreach planning and implementation. In

addition, some of these funds may be utilized to host a Brownfields Workshop in conjunction with EPA Region 6, TCEQ, TX RRC, KSU TAB and/or the National Brownfield Association to educate community members and other stakeholders about brownfields. To ensure the public remains informed and involved, the BRP will provide in-kind additional staff resources (estimated at \$16,000 - \$20,000 over the lifetime of the grants) to conduct outreach meetings, draft press releases, update the City website, and other community outreach activities.

**Task 4 – Brownfields Site Inventory & Area-Wide Planning:** Approximately 5% of each grant, or \$10,000 from hazardous substance and \$5,000 from petroleum, will be utilized for brownfields site inventory and area-wide planning activities. Area-wide planning activities will be conducted with the assistance of professional consultants, as well as community groups and other project partners. This process will involve identifying the revitalization and redevelopment priorities of the community, identifying brownfield sites to add to the BRP inventory that conform with the priorities of the community, and developing strategies to facilitate the cleanup and reuse of priority and catalyst sites. In addition, there will be continual identification of brownfield sites throughout the City, as well as managing the data accumulated in the City's GIS database and EPA's ACRES database.

**Task 5 – Programmatic Costs:** Approximately 3% of each grant, or \$7,000 from hazardous substance and \$3,000 from petroleum, will be utilized for programmatic costs, which will be used for EPA-approved travel and registration fees to the National Brownfield Conference, Regional Forums, and other EPA-approved Brownfield conferences and trainings by the City's Brownfield Program staff. All other programmatic costs will be provided, in-kind, by the City, including all personnel costs (estimated at \$150,000 over the lifetime of the grants).

## ii. Budget Tables

*Table 4: Proposed Hazardous Substance Assessment Grant Budget*

Budget Categories	Project Tasks					Total
	Task 1 Site Assessments	Task 2 Cleanup Planning	Task 3 Community Outreach	Task 4 Site Inventory/ Area-wide Planning	Task 5 Programmatic Costs	
Personnel	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
Fringe Benefits	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
Travel	\$0	\$0	\$0	\$0	\$5,000.00	<b>\$5,000.00</b>
Equipment	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
Supplies	\$0	\$0	\$2,000.00	\$0	\$0	<b>\$2,000.00</b>
Contractual	\$147,000.00	\$16,000	\$15,000.00	\$10,000.00	\$0	<b>\$188,000.00</b>
Other	\$0	\$0	\$3,000	\$0	\$2,000	<b>\$5,000</b>
<b>Subtotal</b>	<b>\$147,000.00</b>	<b>\$16,000</b>	<b>\$20,000.00</b>	<b>\$10,000.00</b>	<b>\$7,000.00</b>	<b>\$200,000.00</b>

*Table 5: Proposed Petroleum Assessment Grant Budget*

Budget Categories	Project Tasks					Total
	Task 1 Site Assessments	Task 2 Cleanup Planning	Task 3 Community Outreach	Task 4 Site Inventory/ Areawide Planning	Task 5 Programmatic Costs	
Personnel	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
Fringe Benefits	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>

Travel	\$0	\$0	\$0	\$0	\$2,000.00	<b>\$2,000.00</b>
Equipment	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
Supplies	\$0	\$0	\$1,000.00	\$0	\$0	<b>\$1,000.00</b>
Contractual	\$63,500.00	\$16,000	\$10,000.00	\$5,000.00	\$0	<b>\$94,500.00</b>
Other	\$0	\$0	\$1,500.00	\$0	\$1,000.00	<b>\$2,500.00</b>
<b>Subtotal</b>	<b>\$63,500.00</b>	<b>\$16,000</b>	<b>\$12,500.00</b>	<b>\$5,000.00</b>	<b>\$3,000.00</b>	<b>\$100,000.00</b>

### c. Ability to Leverage

Assessment Grant funds are vital to catalyzing redevelopment projects, and although these funds alone are rarely sufficient to ensure successful redevelopment, they do provide a foundation of information and resources that can create further leveraging opportunities. BRP is confident that revitalization efforts by community organizations and collaborative partnerships, like the Brownfields to Parks Initiative, light rail and other transit-oriented development, and affordable housing projects, are well positioned to leverage additional federal, state, and local funding, as well as attract private investment, to ensure their success. Through the GEEMD *Livable Centers Master Plan*, \$29 million has been invested over the past 7 years on improvement projects, resulting in 4 miles of sidewalk, 9 miles of bikeways and trails, 700 trees and 250 pedestrian oriented lights. Table 6 illustrates examples of future leveraging opportunities that have been committed to brownfields redevelopment projects or have been identified as viable options for additional funding.

*Table 6: Leveraged Funds*

Entity	Dollar Amount	Description
<b>Assessment/Planning</b>		
City of Houston**	\$170,000 over lifetime of grant	The BRP provides in-kind programmatic costs for staff resources and conducting meetings and other community outreach activities
	50% of infrastructure costs	The Developer Participation Contract provides developers a 50% reimbursement of required infrastructure costs.
TCEQ**	\$6,000	Commitment to perform a Phase I ESA for the Velasco Street Incinerator site (estimated cost)
	\$30,000	Commitment to perform a Phase II ESA for the Velasco Street Incinerator site (estimated cost)
US EPA**	\$248,400	FY14 Assessment Grant funds budgeted for Phase I & II ESAs and cleanup planning of hazardous substances and petroleum impacted sites
	\$103,600	FY14 Assessment Grant funds budgeted for site inventory and area-wide planning activities
<b>Redevelopment</b>		
U.S. DOT**	\$450 million	Creation of the METRO Light Rail North Line, which runs through the East End
Harrisburg Tax Increment Reinvestment Zone**	\$128 million	Improvements and services to support revitalization of the East End, including: <ul style="list-style-type: none"> <li>Design and construction of public utilities including water, wastewater, and storm water systems</li> <li>Design and construction of major and minor roadways and streets including improvements/enhancements</li> <li>Cultural and Public Facility Improvements</li> <li>Parks and Recreational Facilities</li> <li>Economic Development</li> </ul>
National Parks Service**	Technical Assistance	Technical assistance for conservation and outdoor recreation projects.
<i>See Appendix F – Documentation of Leveraged Resources</i>		
<i>** Committed resources</i>		

### **3. Community Engagement and Partnerships**

#### **a. Engaging the Community**

**i. Community Involvement Plan:** To ensure project success and community participation, the BRP developed a Community Relations Plan (CRP) specific to the East End target area using FY14 Assessment Grant dollars. The CRP serves as a guide for involving and engaging with the community, as well as eliciting community member participation, and has four key community relations objectives: 1) Educate and inform stakeholders about brownfields funding and BRP opportunities and projects; 2) Develop an understanding of what is important to stakeholders and affected communities; 3) Solicit comments and concerns regarding the assessment and cleanup strategies for the target area and site-specific projects; and 4) Obtain information relevant to property histories, environmental issues, and redevelopment opportunities. The CRP outlines several strategies and tactics for addressing these community relations objectives and other methods of involving the community in the project. These can be viewed in their entirety in Section 3, *Outreach Strategies and Tactics*, in the CRP, which is included in Appendix G. Included in these strategies are the following: meetings with key stakeholders that focus on building partnerships, gathering information, and finding opportunities for potential brownfields projects; focus groups and workshops to provide information on topics of interest including ideas for reuse of brownfields and urban farming, as well as educational sessions that allow residents to ask questions related to their environmental concerns; establishing a volunteer program that creates opportunities to involve community volunteers with BRP; and BRP participation in community events. The CRP also outlines several methods for communicating project progress with the community which are discussed at length in the following section.

**ii. Communicating Progress:** Following notice of award, an initial kick-off meeting, hosted by the BRP and community partners, will be held to introduce the project to community leaders, developers, and other stakeholders. The BRP will also announce the award to the community through a press release to local newspapers and on the City's website. Written and electronic notice of the award, along with assessment grant information, will be provided to each of the community partners and registered civic groups. They will then disseminate this information to residents, community members, and stakeholders. Comments and concerns from the public related to the project will be shared with the BRP staff through meetings with representatives from community partners and other stakeholders. The frequency of these meetings will be determined as the project progresses; however, it is anticipated that a minimum of four meetings will be held per year.

The CRP includes important considerations for communicating with the target area, including channeling communications through the project's current community partners, as well as through any other new partnerships that develop throughout the life of the project. This approach gains the trust of residents since these partners are viewed as allies for community interests. The CRP also addresses strategies for communicating with the target audience, which is largely Hispanic, including ensuring all communications are in English and Spanish, as well as being in nontechnical terms that can be understood by a diverse audience. Aside from web-based technologies (internet, email, social media), additional communication methods must be employed that do not rely on internet since many East End residents may have limited access to internet. An example of an alternative method is posting flyers in public spaces and community centers. The CRP, included in Appendix G outlines several additional strategies aside from those discussed above for communicating progress with the community. The BRP will also continuously seek suggestions from community partners about other effective methods of communications.

#### **b. Partnerships with Government Agencies**

**i. Local/State/Tribal Environmental Authority:** As reflected in the letter of support from the TCEQ, the State's Brownfields Program is pleased to continue the work of assessing and remediating contaminated

properties in the City of Houston (Appendix B). The BRP will continue to work closely with TCEQ staff to ensure they are aware of brownfield projects in the City. The BRP staff already has an exceptional working relationship with the TCEQ and regularly work together on Voluntarily Cleanup, Corrective Action, and Municipal Setting Designation projects. The two programs will continue to develop their relationship by seeking innovative ways to collaborate on projects. In addition to the strong partnerships that exist between the City's BRP and the TCEQ, the BRP is pleased to continue developing its relationship with the Railroad Commission of Texas (RRC) Brownfields Response Program. The RRC is the state agency that is responsible for the regulation of the oil and gas industry, gas utilities, pipeline safety, safety in the liquefied petroleum gas industry, and surface coal and uranium mining. The RRC has supported the BRP in the past by providing assistance and resources as needed. As stated in their letter of support (Appendix B), they are pleased to continue to provide their support for assessment and cleanup of oil-field sites and will assist with determining whether these sites meet the EPA's petroleum site eligibility requirements. As with the TCEQ, the BRP and RRC are actively seeking innovative ways to work together.

ii. Other Governmental Partnerships: Aside from the ongoing partnership with the EPA Region 6 Brownfields Team, the BRP is beginning to collaborate with the U.S. Department of Transportation (DOT), U.S. Housing and Urban Development Department (HUD), and the U.S. Economic Development Administration (EDA). BRP staff first met representatives from each of these agencies at the EPA Region 6 Regional Conference in August 2016 and has been engaging in preliminary discussions about how best to collaborate and further develop these relationships. Because traffic and street patterns, along with increased walkability, are a priority for the target area, as discussed previously, the BRP anticipates involving DOT as these projects develop. The BRP also plans to involve HUD in all project discussions that support affordable housing in the target area since approximately one-third of the community lives at or below the poverty rate. As projects progress beyond the early assessment and planning stages, the BRP plans to involve EDA in discussions to determine how best to develop projects that will have the most positive economic impacts on the community, as well as assist with locating additional financial resources.

The Port of Houston (the Port), one of the busiest ports in the world, has committed to an environmental management approach that enables it to protect and preserve the surrounding environment, including the Greater East End target area. The BRP and the Port are collaborating on many assessment projects along the banks of Buffalo Bayou, in the East End, to improve air and water quality in the area. The contamination on these project sites is largely due to the petrochemical industry that has occupied this portion of Buffalo Bayou for decades. The two groups are also working together to promote environmental stewardship and pollution prevention in the community. (Letter of Support, Appendix C)

The Greater East End target area has long been considered to have high needs for additional park space. This community need has allowed the BRP and the City of Houston Parks and Recreation Department (HPRD) to collaborate very closely on several projects. This collaboration resulted in the Brownfields to Parks Initiative that began as the result of the FY14 assessment grants. This Initiative will redevelop brownfields into much needed parks and trails in the East End, improving the health and wellbeing of residents and their environment, as well as increasing park space along Buffalo Bayou, which is one of the goals of the GEEMD and BBP, as previously discussed. The BRP and the HPRD will be able to continue to collaborate on this initiative with other community partners if additional assessment grant funding is received. The two groups are also partnering on multiple grant-funded projects, including the Buffalo Bend-Hidalgo Greenway project that is being partially funded by the Coastal Management Program. The two groups will continue to assist each other at every possible opportunity. (Letter of Support, Appendix C)

The BRP will also work closely with the City's Health Department to ensure community health and wellness priorities are addressed (Letter of Support, Appendix C). Because air pollution is of great concern within the City, especially within the East End, the Health Department is actively involved in air quality monitoring, public exposure evaluations, and assessing impact on community health, as well as implementing mitigation and prevention strategies and increasing community education and awareness. The BRP and the Health Department are collaborating in order to further air pollution reduction and education activities in both the East End target area and the City as a whole. In addition, the expertise of the Health Department will be called upon to verify health threats posed by identified contamination, identify related toxicological issues, perform risk evaluations, and design and conduct notification and education programs.

### **c. Partnerships with Community Organizations**

**i. Community Organization & Role:** The BRP is pleased to have partnerships with the following organizations for this project; letters of support are included in Appendix D. The BRP plans to continue to create new partnerships with additional community groups as the project develops.

*Greater East End Management District:* The GEEMD was formed by the Texas Legislature in 1999 to function as a tool for economic development and revitalization of the area. The GEEMD develops and implements projects and programs that create a safe environment within the East End in both perception and reality, enhance the image of the East End, improve infrastructure and amenities to the East End, attract more business and investments to the area, and improve business opportunities in order to increase economic activity for the business property owners, tenants, and their customers. In 2011 the GEEMD developed the *Greater East End Livable Centers Master Plan* (see Appendix H), which encourages development supportive of the Sustainable Communities Livability Principles, established by the EPA-HUD-DOT Partnership for Sustainable Communities, and includes guidance for pedestrian-friendly traffic and street patterns, sustainable development and greenways, and preservation of neighborhood character. By partnering with the GEEMD, the BRP will be able to assist the GEEMD in obtaining their goals related to East End revitalization. In exchange, the GEEMD provides a vital link between the BRP and the residents, community members, business owners, and other stakeholders in the East End.

*Buffalo Bayou Partnership:* The Buffalo Bayou Partnership (BBP) is a nonprofit organization that has been revitalizing and transforming Buffalo Bayou for approximately 30 years. The BRP began working closely with BBP as the result of outreach activities associated with the BRP's FY14 Assessment Grants. This partnership has continued to grow through projects and other activities within the community. As discussed previously, increasing and connecting park space along Buffalo Bayou and throughout the East End community is a priority of the *GEEMD Livable Centers Master Plan*, and the BRP and BBP have been actively working to bring this vision to fruition. Aside from the Brownfields to Parks Initiative, a project that resulted from collaborations associated with the FY14 grants and is previously discussed, this partnership has led to the identification of additional brownfield sites and planning for appropriate end uses, as well as identifying additional projects that align with the priorities of the community.

*Japhet Creek Civic Association:* The Japhet Creek Civic Association (JCCA) is a community organization that was created by East End residents who have made it their missions to preserve and restore Japhet Creek, one of the last remaining natural tributaries of Buffalo Bayou. In addition, JCCA has been assisting St. Catherine's Montessori School in plans to develop an urban garden on property that members of JCCA have committed to donating to the school. The BRP has partnered with JCCA to help facilitate this donation by conducting a Phase I ESA, a Phase II ESA if necessary, and will assist with cleanup planning in order to bring this project to fruition. Aside from partnering on this project, the BRP will assist JCCA with community outreach events, including Japhet Creek cleanup events. JCCA is

assisting the BRP by serving as a liaison with the entire community, which facilitates the exchange of ideas and information between the community and the BRP and other partners.

*Fifth Ward Community Redevelopment Corporation:* The Fifth Ward Community Redevelopment Corporation (FWCRC) is a nonprofit organization that was created by residents, business owners, educators, and civic leaders in the Fifth Ward, which is a smaller geographic subdivision that is partially located within the Greater East End target area, to revitalize their community. FWCRC has partnered with BRP and other community partners on the previously discussed Brownfields to Parks Initiative and affordable housing projects. In addition, this partnership involves the continuous identification of additional brownfields sites, planning for appropriate end uses, and identifying additional projects that align with the priorities of the community. In addition, FWCRC serves as a liaison between BRP and the community, which facilitates the exchange of ideas and information between the community and the BRP and other partners.

ii. Letters of Commitment: Letters of Commitment confirming support of the project and commitments to the planning and implementation of this project have been attached to this proposal in Appendix D.

#### **d. Partnerships with Workforce Development Programs**

The City of Houston has a "Hire Houston First" ordinance that allows the City to give preference when bidding for contracts to Houston firms who hire residents to perform the work. This ordinance benefits local residents with job opportunities, directly helping those who have had to live in areas scarred by industry and affected by contamination. The ability to use this requirement in selecting contract work for the BRP helps to provide better employment for local community members who may have been disproportionately affected by brownfield sites. In addition, Texas Southern University's Barbara Jordan – Mickey Leland School of Public Affairs (BJMLSPA) developed the Environmental Career Worker Training Program in 2012 with funding from the National Institute of Environmental Health Sciences (NIEHS). The purpose of this program is to prepare and train unemployed or underemployed men and women within the Houston area for entry into the construction or environmental industries. The BRP will work with BJMLSPA and coordinate with community partners to ensure target area residents are made aware of any potential training and employment opportunities in brownfields assessment, cleanup, or redevelopment.

### **4. Project Benefits**

#### **a. Welfare, Environmental, & Public Health Benefits**

As previously discussed, the residents of the East End have been disproportionately affected for decades by the economic decline of the area and the health and environmental impacts of the industrial facilities and the nearby petrochemical industry. Assessment Grant funds will allow for the continued assessment and cleanup planning of brownfields, leading to cleanup and redevelopment in the area, along with assisting in the advancement of air quality projects through a partnership with the City's Health Department. It is anticipated that by removing contamination from air, soil, and groundwater, residents' health and welfare will improve by limiting inhalation, ingestion, and contact exposures and decreasing respiratory distress in sensitive populations. It is also anticipated that by increasing the walkability and the amount of park space available in the community, the percentages of overweight/obese children and adults, along with diabetes and high blood pressure diagnoses, will decrease, bringing them closer to the city, state, and national averages. The creation of walkable neighborhoods and pedestrian connections to the new light rail system along the Harrisburg corridor will support efforts to reduce air pollution from vehicular traffic. In addition, the redevelopment of the priority sites, as well as any other sites identified during the lifetime of the grant, will increase employment and economic growth in the area by bringing viable employment opportunities to an area in dire need

## **b. Economic & Community Benefits**

Although quantifying the precise economic benefits from redevelopment of sites with this assessment grant is challenging, profound benefits are anticipated if the requested \$300,000 of funding is received. Several of the brownfield sites within the East End have been abandoned, resulting in nearly \$300,000 of decreased tax base, leaving the tax burden to the City. These sites not only provided employment opportunities in the area, they also provided an increased tax base for the East End. The repercussions of lost employers and decreased tax base have been radiating through the community for decades. The redevelopment of abandoned and other brownfield sites will increase employment and economic growth in the area by bringing viable employment opportunities to an area in dire need of them, while simultaneously expanding the tax base and, subsequently, available resources to the community.

The greater Houston metropolitan area experiences population growth of approximately one million people every decade. With our prevailing development model of expanding ever outward into undeveloped land, each decade of growth requires an additional 300 square miles of open land to be developed – the Katy Prairie, coastal wetlands, and East Texas pine forests are likely to take the brunt of the growth. However, there are significant opportunities for redeveloping existing areas in the city's urban core. Houston's East End is poised to be one of the next redevelopment centers with its close proximity to downtown and great deal of undeveloped and underdeveloped land. If redevelopment is done properly, this growth could add substantially to the City's tax base, prosperity, and quality of life.

## **5. Programmatic Capability and Past Performance**

### **a. Audit Findings**

The City of Houston has not had an adverse audit finding.

### **b. Programmatic Capability**

The BRP is ready to implement these assessment grants, continuing the progress that has been made in the target area with the FY14 assessment grants. The relationship that has been built between the target area community and the BRP will allow for site selection, revitalization/reuse planning, and community outreach activities to continue immediately upon receipt of the award. The BRP will begin the contractor procurement process upon verbal notification of award to ensure contracts are in place upon receipt of Cooperative Agreement. Additionally, the BRP will seek approval to begin community outreach activities prior to Cooperative Agreement approval. These factors will help ensure timely and successful expenditure of funds. The BRP will be responsible for the day-to-day grant operations including updating and maintaining the brownfield inventory, distributing information about the project to the community, and tracking project progress. The BRP will also be responsible for procuring all contractual services, submittal of required reports to the EPA, and managing the brownfields information within the City's GIS database. The BRP Program Manager and Project Manager will manage and track all financial transactions and generate required financial reports, quarterly reports, and track all minority or women-owned business work for each site and submit the necessary reports to EPA, ensuring the completion of all technical, administrative and financial requirements of the project and grant.

The City of Houston has managed a successful Brownfields Redevelopment Program and several EPA Assessment Grants over recent years. The success of the program has been largely due to the diverse background of those working directly for the BRP, as well as relationships with other City programs and departments. The Program Manager is an Environmental Program Manager with the City and is successfully managing both the City's Brownfields Redevelopment and Municipal Setting Designation Programs. In addition to managing U.S. EPA Brownfield Assessment grants, she has also successfully managed multiple grants funded by the U.S. Department of Energy and the Iowa Office of Energy Independence and she has an extensive background in environmental consulting. The Project Manager for the BRP has been affiliated with the BRP for several years and his background in political science



and public administration has been fundamental to the success of the program. Other City staff that will work on the program include a licensed professional engineer with a background in oilfield remediation and water and wastewater infrastructure, as well as an environmental attorney who is a specialist in water and land use issues. These individuals constitute the core staff of the BRP, bringing a unique and comprehensive perspective to the program. In addition, staff in the Mayor's Office, the Economic Development office, the Health Department, and the Parks and Recreation Department also work closely with the Program Manager to ensure the success of the program.

**c. Measuring Environmental Results: Anticipated Outputs/Outcomes**

BRP funding has proven to be a catalyst for economic growth by removing barriers to redevelopment and economic improvement projects, revitalizing tax delinquent properties, and creating jobs through construction and new business. By tracking, measuring, and evaluating progress, the BRP is able to demonstrate how outcomes contribute to the overall success of projects and revitalization efforts. The BRP uses metrics such as number of sites assessed; acres cleaned and/or redeveloped; acres of park and open space created; amount of hike and bike trails created; and number of businesses and/or employment opportunities created to measure and evaluate project progress in the East End target area. Much of this data is tracked through the EPA ACRES database as sites are assessed. Documenting community outreach efforts is another essential component to evaluating project successes. The CRP, discussed earlier, led to the development of a database for tracking community outreach activities and evaluates items such as the outreach tactic and the specific goal of the outreach as it pertains to community and BRP priorities. This tool has proved itself to be essential in determining which types of outreach appear to be most effective in the target community, allowing the BRP to focus efforts on methods that are most effective.

**d. Past Performance & Accomplishments**

**i. Currently or Has Ever Received an EPA Brownfields Grant:**

*1. Accomplishments:* The City of Houston has successfully managed several EPA grants over the years. As a result of this funding, over 75 sites have been redeveloped, more than 3,000 acres restored to beneficial use, more than \$5 million in tax revenue has been generated, over \$800 million in investment for cleanup and redevelopment, and over 4,000 new jobs have been created or retained.

*2. Compliance with Grant Requirements:* All ongoing, quarterly, semiannual, and annual reporting requirements for past and current funding agreements have been submitted to the EPA per the Brownfields Cooperative Agreements in a timely manner. Each project has met programmatic goals and, in many cases, has exceeded the goals stated in work plans. When additional time was needed, the BRP was granted extensions to provide reports or other needed information. All necessary information has been, and will continue to be, entered in ACRES promptly as it occurs, ensuring that ACRES is kept current, as it has been in the past. Most recently, the BRP was the recipient of \$400,000 in Hazardous Substance and Petroleum community-wide assessment grants in FY14 and is actively utilizing these funds to achieve project and programmatic goals. These grants experienced delays due to early unexpected challenges; however, by working closely with EPA Region 6 staff, these challenges were able to be overcome and exemplary progress has since been made. As previously discussed, the BRPs only source of guaranteed funding is currently the FY14 assessment grants. Without this funding and additional assessment grant funding, the BRP would be unable to fund the assessment work that is necessary to move existing sites in the brownfields inventory into the redevelopment stages. Previously, the BRP has successfully closed a Pilot Grant in the amount of \$600,000, as well as assessment grants awarded in FY05 and FY08. All funds awarded by the EPA have been spent and the grants were closed out as required.

## Regional Priorities Form/Other Factors Checklist

**Name of Applicant:** City of Houston, Texas

### Regional Priorities Other Factor

If your proposed Brownfields Assessment project will advance the regional priority(ies) identified in Section I.F., please indicate the regional priority(ies) and the page number(s) for where the information can be found within your 15-page narrative. Only address the priority(ies) for the region in which your project is located. EPA will verify these disclosures prior to selection and may consider this information during the selection process. If this information is not clearly discussed in your narrative proposal, it will not be considered during the selection.

Regional Priority Title(s):

- Assistance to Communities That Have Limited In-House Capacity to Manage Brownfields Projects
- OR
- Improving Air Quality

**Page Number(s):** 4, 5, 11, 12, 13, Appendix E

### Assessment Other Factors Checklist

Other Factor	X	Page #
<i>None of the Other Factors are applicable</i>		
Community population is 10,000 or less		
Applicant is, or will assist, a federally recognized Indian tribe or United States territory		
Target brownfield sites are impacted by mine-scarred land.		
Project is primarily focusing on Phase II assessments		
Applicant demonstrates firm leveraging commitments for facilitating brownfield project completion by identifying amounts and contributors of funding in the proposal and have included documentation	X	9, Appendix F
Recent natural disaster(s) (2012 or later) occurred within the community, causing significant community economic and environmental distress.	X	5
Recent (2008 or later) significant economic disruption has occurred within the community, resulting in a significant percentage loss of community jobs and tax base	X	5
Applicant is of the 24 recipients, or a core partner/implementation strategy party, or a “manufacturing community” designation provided by the Economic Development Administration (EDA) under the Investing in Manufacturing Communities Partnership (IMCP).		
Applicant is a recipient or a core partner of a HUD-DOT-EPA Partnership for Sustainable Communities (PSC) grant funding or technical assistance that is directly tied to the proposed Brownfields project, and can demonstrate that funding from a PSC grant/technical assistance has or will benefit the project area.		
Applicant is a recipient of an EPA Brownfields Area-Wide Planning grant		

Bryan W. Shaw, Ph.D., P.E., *Chairman*  
Toby Baker, *Commissioner*  
Jon Niermann, *Commissioner*  
Richard A. Hyde, P.E., *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

December 7, 2016

Ms. Jennifer M. Clancey, Program Manager  
City of Houston Department of Public Works & Engineering  
P.O. Box 131927  
Houston, Texas 77219-1927

Re: City of Houston's Proposal for a U.S. Environmental Protection Agency FY17 Brownfields Assessment Grant

Dear Ms. Clancey:

The Texas Commission on Environmental Quality (TCEQ) is pleased to offer this letter of support for the City of Houston's (Houston) proposal for \$200,000 for hazardous waste assessment and \$100,000 for petroleum assessment to the U.S. EPA for a FY17 Brownfields Assessment Grant. The TCEQ believes that the grant will significantly benefit Houston by enhancing the local economy, increasing the tax base and improving the environment.

Houston has been active in identifying priority sites and establishing partnerships with community organizations, state, and federal government entities. These partnerships will help to continue building on the accomplishments from previous grants, for the target area of the Greater East End. TCEQ is excited to assist in continuing the work of assessing and remediating properties in the City of Houston. TCEQ and Houston will work closely to ensure each is aware of brownfield projects in the City of Houston. TCEQ and Houston already have an exceptional working relationship and regularly work together on Voluntarily Cleanup, Corrective Action, and Municipal Setting Designation projects. The two programs will continue to develop their relationship by seeking innovative ways to collaborate on projects.

The TCEQ looks forward to working with Houston on its Brownfields initiative and supports the grant proposal. You may contact me at 512-239-2252 or [Kristian.livingston@tceq.texas.gov](mailto:Kristian.livingston@tceq.texas.gov) if you have any questions or if you would like additional information.

Sincerely,

A handwritten signature in blue ink, appearing to read "K.M. Livingston".

Kristy Mauricio Livingston, Brownfields Program Manager  
VCP-CA Section  
Remediation Division

KML/bk

cc: Ms. Amber Howard, EPA Region 6, Brownfields Section, [howard.amber@epa.gov](mailto:howard.amber@epa.gov)  
Ms. Denise Williams, EPA Region 6, Brownfields Section, [williams.denise@epa.gov](mailto:williams.denise@epa.gov)

## Appendix A

### Threshold Criteria

## Threshold Criteria

### 1. Applicant Eligibility

The City of Houston is an eligible entity, as a General Purpose Unit of Local Government, as defined by 40 CFR Part 31.

### 2. Community Involvement

To ensure project success and community participation, the BRP developed a Community Relations Plan (CRP) specific to the East End target area using FY14 Assessment Grant dollars. The CRP serves as a guide for involving and engaging with the community, as well as eliciting community member participation, and has four key community relations objectives: 1) Educate and inform stakeholders about brownfields funding and BRP opportunities and projects; 2) Develop an understanding of what is important to stakeholders and affected communities; 3) Solicit comments and concerns regarding the assessment and cleanup strategies for the target area and site-specific projects; and 4) Obtain information relevant to property histories, environmental issues, and redevelopment opportunities. The CRP outlines several strategies and tactics for addressing these community relations objectives and other methods of involving the community in the project. These can be viewed in their entirety in Section 3, *Outreach Strategies and Tactics*, in the CRP, which is included in Appendix G. Included in these strategies are the following: meetings with key stakeholders that focus on building partnerships, gathering information, and finding opportunities for potential brownfields projects; focus groups and workshops to provide information on topics of interest including ideas for reuse of brownfields and urban farming, as well as educational sessions that allow residents to ask questions related to their environmental concerns; establishing a volunteer program that creates opportunities to involve community volunteers with BRP; and BRP participation in community events. The CRP also outlines several methods for communicating project progress with the community and are discussed at length in the following section.

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The CRP includes important considerations for communicating with the target area, including channeling communications through the project's current community partners, as well as through any other new partnerships that develop throughout the life of the project. This approach gains the trust of residents since these partners are viewed as allies for community interests. The CRP also addresses strategies for communicating with the target audience, which is largely Hispanic, including ensuring all communications are in English and Spanish, as well as being in nontechnical terms that can be understood by a diverse audience. Aside from web-based technologies (internet, email, social media), additional communication methods must be employed that do not rely on internet since many East End residents may have limited access to internet. An example of an alternative method is posting flyers in public spaces and community centers. The CRP, included in Appendix G outlines several additional strategies aside from those discussed above for communicating progress with the community. The BRP will also continuously seek suggestions from community partners about other effective methods of communications.

## Appendix B

Letters of Support: State Environmental Authority



Bryan W. Shaw, Ph.D., P.E., *Chairman*  
Toby Baker, *Commissioner*  
Jon Niermann, *Commissioner*  
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The Texas Commission on Environmental Quality (TCEQ) is pleased to offer this letter of support for the City of Houston's (Houston) proposal for \$200,000 for hazardous waste assessment and \$100,000 for petroleum assessment to the U.S. EPA for a FY17 Brownfields Assessment Grant. The TCEQ believes that the grant will significantly benefit Houston by enhancing the local economy, increasing the tax base and improving the environment.

Houston has been active in identifying priority sites and establishing partnerships with community organizations, state, and federal government entities. These partnerships will help to continue building on the accomplishments from previous grants, for the target area of the Greater East End. TCEQ is excited to assist in continuing the work of assessing and remediating properties in the City of Houston. TCEQ and Houston will work closely to ensure each is aware of brownfield projects in the City of Houston. TCEQ and Houston already have an exceptional working relationship and regularly work together on Voluntarily Cleanup, Corrective Action, and Municipal Setting Designation projects. The two programs will continue to develop their relationship by seeking innovative ways to collaborate on projects.

The TCEQ looks forward to working with Houston on its Brownfields initiative and supports the grant proposal. You may contact me at 512-239-2252 or [Kristian.livingston@tceq.texas.gov](mailto:Kristian.livingston@tceq.texas.gov) if you have any questions or if you would like additional information.

Sincerely,

A handwritten signature in blue ink, appearing to read "K.M. Livingston".

Kristy Mauricio Livingston, Brownfields Program Manager  
VCP-CA Section  
Remediation Division

KML/bk

cc: Ms. Amber Howard, EPA Region 6, Brownfields Section, [howard.amber@epa.gov](mailto:howard.amber@epa.gov)  
Ms. Denise Williams, EPA Region 6, Brownfields Section, [williams.denise@epa.gov](mailto:williams.denise@epa.gov)



# RAILROAD COMMISSION OF TEXAS

## OIL AND GAS DIVISION

December 12, 2016

Jennifer M. Clancey  
Program Manager  
City of Houston Department of Public Works & Engineering  
Planning and Development Services Division  
P.O. Box 2688  
Houston, TX 77252-2688

Re: City of Houston's Application for U.S. Environmental Protection Agency Brownfields  
Community-Wide Combined Petroleum and Hazardous Substances Assessment Grant

Dear Ms. Clancey:

Staff of the Railroad Commission of Texas (RRC) is pleased to provide this letter of support for the City of Houston's application to the U.S. Environmental Protection Agency (EPA) for the U.S. EPA Brownfields Community-Wide Combined Petroleum and Hazardous Substances Assessment Grant. If awarded, the City of Houston will utilize these funds to enhance the revitalization of the City's overburdened Greater East End by providing environmental assessments and cleanups as an incentive for redevelopment, continuing the Brownfields to Parks initiative, and continuing to build on existing partnerships to advance community outreach and community participation.

In addition to supporting your grant application, be aware that the RRC can also provide support for assessment and cleanup of oil-field brownfield sites in Texas and assist with determining whether a former oil-field site meets the EPA's petroleum eligibility requirements.

The RRC looks forward to working with the City of Houston on its brownfields initiatives. Should you have any questions about potential oil field-related brownfield sites in your area, please do not hesitate to contact me at 512-463-8202 or [peter.pope@rrc.texas.gov](mailto:peter.pope@rrc.texas.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Peter G. Pope", written over a horizontal line.

Peter G. Pope, Manager  
Site Remediation Section

cc: Amber Howard, USEPA Brownfields Region 6 (email)



## Appendix C

### Letters of Support: Other Governmental Partnerships

# Port of **Houston** Authority

111 East Loop North  
Houston, Texas 77029-4326

Office: 713.670.2614  
portofhouston.com

**Erik Eriksson**  
Chief Legal Officer

December 15, 2016

Via Email: [Jennifer.clancey@houstontx.gov](mailto:Jennifer.clancey@houstontx.gov)

Ms. Jennifer Clancey, Program Manager  
Brownfields Redevelopment Program  
Department of Public Works & Engineering  
City of Houston  
1002 Washington Avenue  
Houston, Texas 77002

Subject: Support for the City of Houston EPA Grant Application

Dear Ms. Clancey:

The Port of Houston Authority (Port Authority) strongly supports the City of Houston (City) request to the Environmental Protection Agency (EPA) for a FY17 Community-Wide Petroleum and Hazardous Substances Assessment Grant. This EPA grant can support the City's efforts to build strong community partnerships with agencies like the Port Authority, and its work to clean up and strengthen our community.

The Port Authority is directly responsible for the environmental management of its eight terminals and 14,000 acres of property located within the greater Port of Houston area. Continued support from the City can allow the Port Authority to better understand the nature and extent of known and potential contamination at Brownfields sites and develop best-use strategies for their management and redevelopment, including identification of renewable energy sites.

The Port Authority is committed to being an industry leader in environmental stewardship. Collaboration with the work of stakeholders and other government agencies, like the City's Brownfields Redevelopment Program, is a key to achieving this objective. The Port Authority welcomes the opportunity to work with the City and look for ways to build upon the current success of the City's Brownfields Program.

Please let us know how we can further support the Brownfields Program moving forward.

Sincerely,



Erik Eriksson





# CITY OF HOUSTON

Parks and Recreation Department  
A CAPRA Accredited Agency

**Sylvester Turner**

Mayor

Joe Turner  
Director  
Parks and Recreation Department  
2999 S. Wayside Dr.  
Houston, TX 77023

T. 832.395.7000  
F. 832.395.9452  
[www.houstonparks.org](http://www.houstonparks.org)

December 14, 2016

Jennifer M. Clancey  
Program Manager  
Brownfields Redevelopment Program  
City of Houston Department of Public Works & Engineering  
P.O. Box 2688  
Houston, TX 77252-2688

Dear Jennifer,

The Houston Parks and Recreation Department (HPARD) is pleased to support the Brownfields Redevelopment Program's (BRP) grant application to the EPA's Hazardous Materials and Petroleum Brownfields Assessment program. If awarded, this grant will help assess brownfields for potential re-development as parks and trails. The grant will help fund important environmental assessments and cleanup plans needed to make informed decisions about the best re-development of these brownfields.

HPARD's Parks Master Plan identifies the need for 2,861 additional acres of parkland citywide to meet the needs of the City's growing population. HPARD and BRP are working with the Greater East End Management District (GEEMD) and the Buffalo Bayou Partnership (BBP) on the proposed *Brownfields to Parks* initiative as a potential means to increasing parkland in Houston's East End. The targeted area for this initiative is known for its highly industrialized zones, pollution and social justice issues. This program will identify and assess brownfields within the targeted area and serve as a pilot for a possible city-wide brownfields to parks program.

HPARD is currently working with GEEMD and BBP on a grant-funded project to increase parkland and trail connectivity in the East End including the Buffalo Bend-Hidalgo Greenway project. We will continue to work with our partners to help develop and expand parks and trails in Houston. We wish you the best of luck with the EPA's Hazardous Materials and Petroleum Brownfields Assessment grant application.

Sincerely,

Joe Turner  
Director

JT/LC/re

CC: James Koski  
Mark Loethen

Council Members: Brenda Stardig Jerry Davis Ellen R. Cohen Dwight A. Boykins Dave Martin Steve Le Greg Travis Karla Cisneros  
Robert Gallegos Mike Laster Larry V. Green Mike Knox David W. Robinson Michael Kubosh Amanda Edwards Jack Christie  
Controller: Chris Brown



# CITY OF HOUSTON

Houston Health Department

**Sylvester Turner**

Mayor

Bureau of Community and Children's Environmental Health  
8000 N. Stadium Dr.  
Houston, Texas 77054-1823  
Telephone: 832-393-5141  
Fax: 832-393-5210

Stephen L. Williams, M.Ed., MPA  
Director  
Houston Health Department  
8000 N. Stadium Drive  
Houston, Texas 77054-1823

T. 832-393-5169  
F. 832-393-5259  
[www.houstontx.gov](http://www.houstontx.gov)  
[www.houstonhealth.org](http://www.houstonhealth.org)

December 9, 2016

Ms. Jennifer M. Clancey  
Brownfields Redevelopment Program Manager  
City of Houston Department of Public Works & Engineering  
Planning and Development Services Division  
1002 Washington Avenue, Office 339  
Houston, Texas 77002

Re: Brownfields Redevelopment Program Proposal for U.S. Environmental Protection Agency Brownfields Community-Wide Petroleum and Hazardous Substances Assessment Grant

Dear Ms. Clancey:

The City of Houston Health Department is pleased to provide this letter of support for the City's Brownfields Redevelopment Program (BRP) proposal to the U.S. Environmental Protection Agency (EPA) for the EPA Brownfields Community-Wide Petroleum and Hazardous Substances Assessment Grant.

Air pollution is a major environmental health concern for the City of Houston. As you know, the Houston Health Department, through its Bureau of Community and Children's Environmental Health and Bureau of Pollution Control and Prevention is actively involved in identification of air pollution, evaluation of exposure, and assessment of the resulting impact on the health of community, as well as implementing mitigation and prevention strategies and increasing education and awareness.

Air pollution and health risk in the City of Houston varies spatially depending upon proximity to emissions sources as well meteorological conditions. Major sources of air pollution emissions in Houston include mobile sources (e.g., freeway vehicle traffic), major sources (e.g. refineries and chemical plants) and port-related emissions. Unfortunately, the Brownfields Redevelopment Program grant proposal area, the Greater East End, suffers from the highest air toxic emissions and inhalation cancer risk in the city due to its proximity to major emission sources and the Port of Houston.

In addition to routine activities, specific efforts focused on the Greater East End include, collaboration with the University of Texas School of Public Health and Rice University to understand the human health risk from the area metal recycler facilities and development of a public health action plan based on the risk identified; collaboration with Air Alliance Houston on educating the public about the importance of limiting heavy duty diesel vehicle idling; and partnering with EPA on the roll out of a Village Green Air Pollution Monitor at Cesar Chavez High School.

However, much more work is needed to improve air quality and protect public health in this area. We are dedicated to working closely with BRP to further air pollution reduction and education activities in the Great East End. Our collaboration will ensure environmental health and wellness priorities continue to be addressed and the health and social well-being of the community is protected.

Sincerely,

Loren Raun, PhD  
Chief Environmental Science Officer  
Houston Health Department

## Appendix D

Letters of Commitment: Community Organization Partnerships





**GREATER  
EAST END  
DISTRICT**

THE PEOPLE BEHIND  
THE PROGRESS

December 14, 2016

Ms. Jennifer M. Clancey  
Brownfields Redevelopment Program Manager  
1002 Washington Avenue  
Houston, Texas 77002

Nory Angel  
SER Houston  
Chair  
Resident

William McConnell  
Eco-Services  
Vice-Chair

Taryn Sims  
Wulfe Management Services, Inc.  
Secretary

Craig Rohden  
Space City Credit Union  
Treasurer  
Resident

Rodrigo Tejada  
L-K Industries  
Vice-Treasurer

Blanca Blanco  
Cetera Advisors  
Resident

Erin Dyer  
Lovett Commercial

Domenic Laurenzo  
El Tiempo Cantina

Joe Meppelink  
METALAB

Marjorie Peña  
Neighborhood Centers, Inc.

Stephen J. Quezada  
Ogletree, Deakins, Nash,  
Smoak & Stewart, P.C.  
Resident

Susan Sahwani-Garcia  
Chocolate Wasted  
Resident

R.D. Tanner  
Port of Houston Authority

Ann Taylor  
Midway

Jose Valdez  
Frost Bank

Diane Schenke  
President

3211 Harrisburg Blvd.  
Houston, TX 77003

713.928.9916

RE: Application by the City of Houston for Hazardous Materials and Petroleum  
Brownfields Assessment grants.

Dear Ms. Clancey:

The Greater East End Management District (GEEMD) works with businesses, public entities, and residents on issues concerning the redevelopment of the East End. A reoccurring issue during redevelopment is potential contamination, as the East End transforms from an industrial to a residential/commercial area. The East End is immediately adjacent to Downtown Houston, and the new Green Line Light Rail has opened within the last year. The East End is predominantly Hispanic (90%), with a median household income of \$26,657. Redevelopment is important in this disadvantaged neighborhood because it is short on retail services, forcing people without ready access to cars to travel distances to buy clothes and to shop for groceries.

GEEMD has been very involved with the City of Houston Brownfields Redevelopment Program and projects associated with the FY14 Assessment Grants, and is excited about further work pursuant to additional grants. The GEEMD often works with potential site purchasers and redevelopers.

- One of the major uncertainties is a lack of information on potential contamination, making an evaluation of market value very difficult. When GEEMD explained this problem, the City Of Houston decided to create an area wide Brownfields inventory to identify and prioritize properties eligible for environmental assessment through their program. GEEMD has also worked to connect the City to land owners who may be interested in the Phase I/Phase II assessments possible pursuant to the FY14 Assessment grants. GEEMD was aware of a potential sale of several acres to a school. The school was concerned about getting into a transaction with high cleanup costs, so the City's abilities are very important to make that project move forward.
- GEEMD has also worked to connect this City effort to other stakeholders focused on creating access of neighborhoods both south and north of Buffalo Bayou to trails and other parklands adjacent to the Bayou. Buffalo Bayou Partnership and the Fifth Ward Redevelopment Corporation have been GEEMD's partners in a recent study, and inclusion of these two groups enhances the probability of success on a brownfields to parks initiative.



**GREATER  
EAST END  
DISTRICT**

THE PEOPLE BEHIND  
THE PROGRESS

In summary, the City has been very willing to work with local partners to help a redevelopment that is already underway. This grant permits landowners and potential purchasers to understand a particular sites history, and may provide data to move forward on a transaction that will bring another high quality school into this area.

Sincerely,

L. Diane Schenke

The Texas State Legislature created GEEMD in 1999 to lead economic development revitalization of Houston's East End, including infrastructure improvements, beautification, security and public safety, workforce development, and other programs.



**BUFFALO BAYOU  
PARTNERSHIP**

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Thomas Fish, Vice Chair  
Ellyn Wulfe, Vice Chair  
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Dr. Manuel Pacheco  
Bob Phillips  
F. Max Schuette  
Raymond Snokhous  
Georgia Wilson

\*deceased

**President**

Anne Olson

1019 Commerce Street, Suite 200  
Houston, Texas 77002  
713.752.0314  
fax 713.223.3500  
buffalobayou.org  
info@buffalobayou.org

December 6, 2016

Ms. Jennifer Clancey

Program Manager

City of Houston Department of Public Works and Engineering

City of Houston

P. O. Box 1562

Houston, Texas 77251

Dear Ms. Clancey

On behalf of Buffalo Bayou Partnership, I am writing to enthusiastically support the City of Houston's application for the Hazardous Materials and Petroleum Brownfields Assessment Grant. Our non-profit organization oversees restoration and revitalization of Buffalo Bayou, Houston's historic waterway. Over the past 15 years, we have spent approximately \$100 million redeveloping approximately 250 acres of waterfront in downtown and to the west.

Recently, we initiated planning efforts along the bayou's east sector, a very industrial part of our city. Much of the land that Buffalo Bayou Partnership and others own is formerly industrial property that is now vacant as a result of businesses having moved east along the Houston Ship Channel.

The Brownfields to Parks initiative that we have formed with the City of Houston is proving to be invaluable in our restoration and redevelopment work. In addition to the City and Buffalo Bayou Partnership, this collaborative effort (part of the BRP's FY14 Assessment grant) includes the Fifth Ward Community Redevelopment Corporation and Greater East End Management District. With the City as the lead, we have been working on an area-wide inventory of properties to assess their environmental conditions. As part of this process, we also are identifying possible catalyst sites that can be revitalized as part of our bayou planning efforts and neighborhood economic development initiatives.

We urge EPA to fund the City of Houston's current funding application as it will greatly enhance the environmental assessment work that has already taken place.

Thank you for your consideration.

Sincerely,

Anne Olson

President



**Japhet Creek Civic Association** – 4510 Inman St, Houston Tx, 77020  
Japhet Community founded 1894 713-492-9396

December 1, 2016

Jennifer M. Clancey  
Brownfields Redevelopment Program Manager  
City of Houston Department of Public Works & Engineering  
1002 Washington Avenue  
Houston, TX 77002

Dear Jennifer,

Japhet Community was developed out of farmland in 1894 at the, then, edge of the city of Houston, along the banks of Japhet Creek. Eileen and I moved here in 1986. It was the place where we could live our dream of a sustainable, low impact lifestyle on a one acre urban farm. We continued to acquire land and homes in the neighborhood and currently own about seven acres. Over those years we have shared our knowledge and land with, Urban Harvest, Central Texas Bee Rescue, Transition Houston, Houston Permaculture Guild, Japhet Creek Nature Conservancy, and, most recently St Catherine's Montessori School.

As Houston has grown, large townhouse and apartment developments have surrounded our tiny neighborhood. Their value has increased our property taxes and made our neighborhood less affordable to renters and older longtime residents. We have been looking for a way to continue living our dream and keep the community focus on the values of that dream.

St. Catherine's has come to us with a proposal that might be the answer. Following the ideals of Maria Montessori, they want to use part of our property to develop a four year high school program focused on agricultural and environmental education to prepare students for a future in the new millennium. Our rental property could provide housing to some of the teachers or staff. We see this as a solution to the economic pressure being put on our neighborhood. We will sell them our home (the original 1894 home) and one acre of land and donate an additional three acres, with it the deeds to the properties restricted to agriculture and education use only.

We were overjoyed to find out about the EPA Brownfields Redevelopment Program through an informative meeting with Jennifer Clancey. One of the first concerns of St Catherine's was the industrial history of Houston's east end. The area around Buffalo Bayou was the industrial heart of pre 1960's Houston. The MDI superfund site is less than ten blocks away. The parents and board wanted more information. We had no expertise in answering the questions that arose. Jennifer assured us that those questions could be answered with a phase one and phase two of the properties.

Our only experience with environmental testing was done by one of our tenants who was using some of our vacant land to raise vegetables to sell at the Navigation St farmers market. It was a six page report done by Texas Plant and Soil Lab in Edinburg Texas at a cost of about \$200 on just a single soil sample. Knowing that the soil the students are growing and eating from is clean and free of pollutants is very important. The information the Brownfields Redevelopment Program provides will be essential to the future of our community and the future of St. Catherine's Montessori School and the students who will study there. Therefore, the Japhet Creek Civic Association overwhelmingly supports the brownfields assessment grant for our community.

Sincerely,  
Jim Ohmart-President  
Japhet Civic Association



**FIFTH WARD  
COMMUNITY  
REDEVELOPMENT  
CORPORATION**

4300 Lyons Ave., Suite 300  
P.O. Box 21502  
Houston, TX  
77226-1502

Main 713-674-0175

Fax: 713-674-0176

<http://www.fifthwardcrc.org>

**Mission Statement**

A catalytic organization  
dedicated to the  
collaborative fostering  
of holistic community  
development.

**Chairman**

Ian Rosenberg

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Charlotte Booker  
Jo Carcedo  
Harvey Clemons  
April Daniel  
Bridgette Dorian  
Bob Eury  
Ted Hamilton  
Wiley Henry  
Carl Shields  
Bridgette Steele  
Charles Turner  
Marcus Vasquez  
Andrew Wright

**President/CEO**

Kathy Flanagan-Payton



Equal Housing Opportunity

December 9, 2016

Jennifer M. Clancey

Program Manager

City of Houston Department of Public Works & Engineering

Dear Ms. Clancey:

On behalf of the Fifth Ward Community Redevelopment Corporation, I am writing to enthusiastically support the City of Houston's funding request for the Hazardous Materials and Petroleum Brownfields Assessment grants. 5<sup>th</sup> Ward, one of the city's oldest communities is rich with opportunity but equally challenged but the number of potential brownfields sites in the historic community. The eastern sector of Houston abutting downtown has been home to manufacturing, warehousing and transportation services given the bayou and access to the port. However, as we work to repurpose some of the now vacant facilities remediation costs often deter development.

The Fifth Ward is a neighborhood that suffers from significant social, environmental and economic challenges. However, we are amidst a real estate renaissance that is given birth to new opportunities in development that will further enhance our ability to offer affordable housing and attract commercial and retail development. The abundance of underutilized, vacant, and dilapidated property in the community has revealed growing complexities resulting from environmental issues, ranging from soil contaminants to drinking water to cleaning compounds to petroleum storage tanks. Planning and remediation of these sites will not be successful without the support of the city.

We are excited about the city's commitment to addressing hazardous material and brownfield remediation for traditionally underserved communities like 5th Ward and East End, both joined by Buffalo Bayou. We along with our partners - Buffalo Bayou Partnership and Greater East End Management District are working together to bring about comprehensive revitalization strategies to further affordable housing and economic development, holistic neighborhood planning and social equity. We are working closely with the City's Brownfields Program and find the Area Wide Inventory Tool to be truly invaluable as we attempt to accelerate development in these areas.

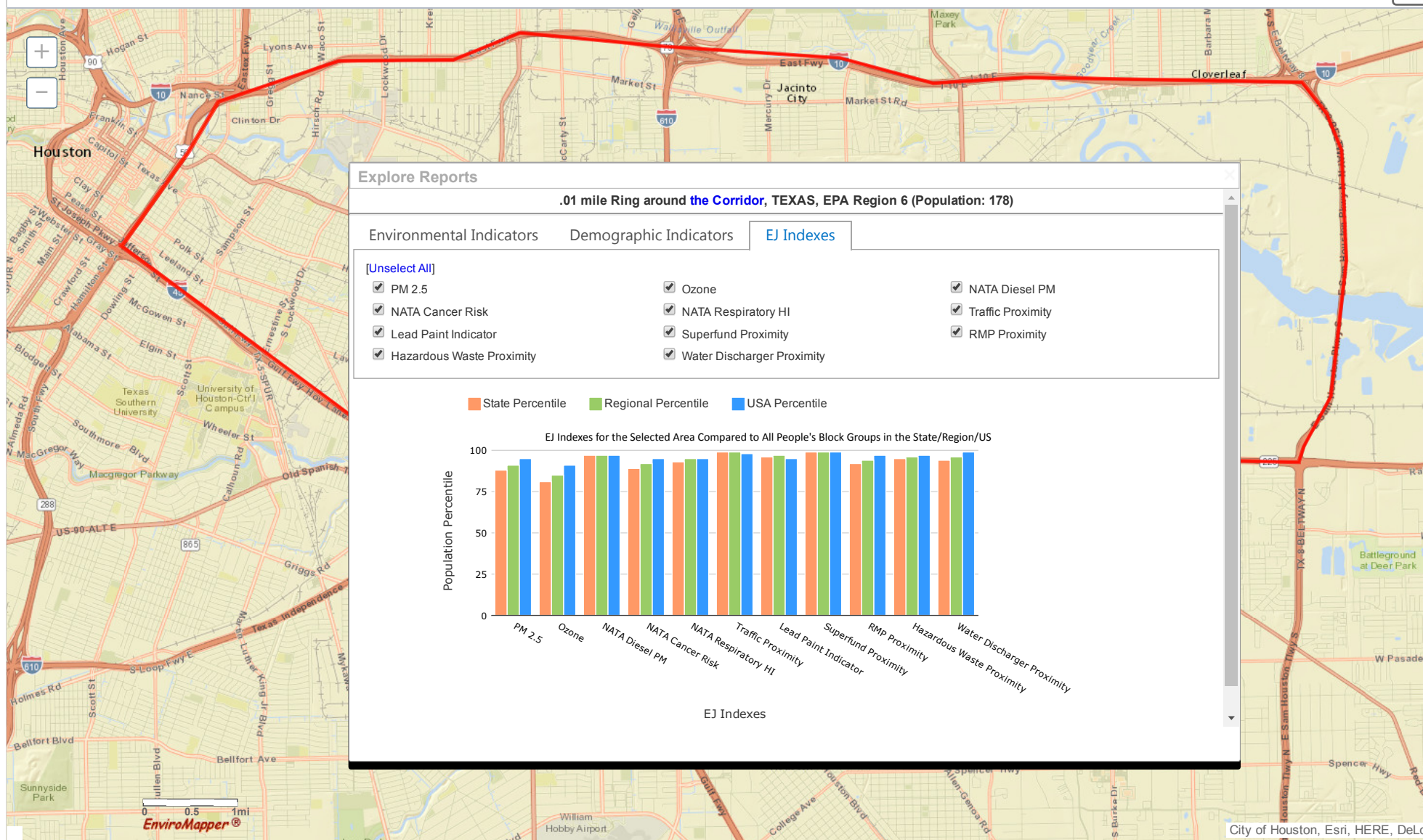
We applaud the city for being so responsive in seeking opportunities such as the Hazardous Materials and Petroleum Brownfields Assessment grants and urge you to give it your upmost consideration.

Sincerely,

Kathy Flanagan Payton  
President/CEO

## Appendix E

Environmental Statistics from EPA Environmental Justice & Mapping Tool



## Appendix F

### Documentation of Leveraged Resources



Bryan W. Shaw, Ph.D., P.E., *Chairman*  
Toby Baker, *Commissioner*  
Jon Niermann, *Commissioner*  
Richard A. Hyde, P.E., *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

December 12, 2016

Ms. Jennifer M. Clancey, Program Manager  
City of Houston Department of Public Works & Engineering  
P.O. Box 131927  
Houston, Texas 77219-1927

Re: City of Houston's Proposals for a U.S. Environmental Protection Agency FY17  
Brownfields Assessment Grant (OLEM-OBLR-16-08)

Dear Ms. Clancey:

The Texas Commission on Environmental Quality (TCEQ) is excited to assist in continuing the work of assessing and remediating properties in the City of Houston (Houston). TCEQ and Houston will work closely to ensure each is aware of brownfield projects in the City of Houston. TCEQ and Houston already have an exceptional working relationship and regularly work together on Voluntarily Cleanup, Corrective Action, and Municipal Setting Designation projects. The two programs will continue to develop their relationship by seeking innovative ways to collaborate on projects.

TCEQ and Houston have had discussions regarding the revitalization of the Velasco Incinerator site. TCEQ estimates we could provide \$6,000 worth of services for the Phase I and \$30,000 for a Phase II. Houston has also been active in the TCEQ's Voluntary Cleanup Program (VCP). VCP is a fee driven program; however, for eligible entities we may choose to waive fees for our services. Sites which have gone through the Brownfields Program have priority for fee waivers. For each Phase I Environmental Site Assessment submitted, TCEQ estimates we could provide \$2,000 worth of services, with an estimated value of approximately \$12,000 over the grant period. For each Phase II ESA submitted, the TCEQ estimates we could provide \$1,000 in services, for the review and technical support for a total of \$5,000 over the grant period.

We look forward to working with Houston in our continued partnership. The TCEQ may provide additional services to assist with meetings, trainings, technical and programmatic assistance. You may contact me at 512-239-2252 or [Kristian.livingston@tceq.texas.gov](mailto:Kristian.livingston@tceq.texas.gov) if you have any questions or if you would like additional information.

Sincerely,

A handwritten signature in blue ink that reads "K.M. Livingston".

Kristy Mauricio Livingston, Brownfields Program Manager  
VCP-CA Section  
Remediation Division

KML/jdm

cc: Ms. Amber Howard, EPA Region 6, Brownfields Section, [howard.amber@epa.gov](mailto:howard.amber@epa.gov)  
Ms. Denise Williams, EPA Region 6, Brownfields Section, [williams.denise@epa.gov](mailto:williams.denise@epa.gov)

P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-1000 • [tceq.texas.gov](http://tceq.texas.gov)

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printed on recycled paper using vegetable-based ink

City of Houston, Texas, Ordinance No. 2013 - 101

**AN ORDINANCE APPROVING THE PROJECT PLAN AND REINVESTMENT ZONE FINANCING PLAN FOR REINVESTMENT ZONE NUMBER TWENTY-THREE, CITY OF HOUSTON, TEXAS (HARRISBURG ZONE); CONTAINING FINDINGS AND OTHER PROVISIONS RELATED TO THE SUBJECT; AND DECLARING AN EMERGENCY.**

\* \* \* \* \*

**WHEREAS**, the City Council of the City of Houston, Texas created Reinvestment Zone Number Twenty-Three on October 19, 2011, by Ordinance No. 2011-900 ("Zone"), pursuant to Chapter 311 of the Texas Tax Code, as amended, for the purposes of Houston's East End; and

**WHEREAS**, on January 25, 2013, the Board of Directors of the Zone approved the Project Plan and Reinvestment Zone Financing Plan for the development of the Zone ("Plan"); and

**WHEREAS**, before the Board of Directors of the Zone may implement the Plan, the City Council must approve the Plan; **NOW, THEREFORE**,

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF HOUSTON, TEXAS:**

**Section 1.** Findings. That the facts and recitals contained in the preamble of this Ordinance are determined to be true and correct and are hereby adopted as part of this Ordinance.

**Section 2.** Approval. That the Project Plan and Reinvestment Zone Financing Plan attached hereto as Exhibit "A" are hereby found to be feasible and are approved. The appropriate officials of the City are authorized to take all steps reasonably necessary to implement the Plan.

**Section 3.** Declaration of Emergency. That there exists a public emergency requiring that this Ordinance be passed finally on the date of its introduction as requested in writing by the Mayor; therefore, this Ordinance shall be passed finally on such date and shall take effect immediately upon its passage and approval by the Mayor; however, in the


event that the Mayor fails to sign this Ordinance within five days after its passage and adoption, it shall take effect in accordance with Article VI, Section 6, Houston City Charter.

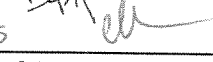
PASSED AND ADOPTED this 6th day of February, 2013.

APPROVED this \_\_\_\_\_ day of \_\_\_\_\_, 2013.

\_\_\_\_\_  
Mayor of the City of Houston

Pursuant to Article VI, Section 6, Houston City Charter, the effective date of the foregoing Ordinance is FEB 12 2013.

  
\_\_\_\_\_  
City Secretary

(Prepared by Legal Department Donna Capps )  
(DRC:drc February 1, 2013) Assistant City Attorney  
(Requested by Andrew F. Icken, Chief Development Officer, Office of the Mayor)  
(L.D. File No. 0421300013001)

D:\TIRZ\TIRZ 23 Harrisburg (East End)\Project Plan\ORD #23 Approving Project Plan 2-01-2013.docx

AYE	NO	
<input checked="" type="checkbox"/>		MAYOR PARKER
....	....	COUNCIL MEMBERS
<input checked="" type="checkbox"/>		BROWN
<input checked="" type="checkbox"/>		DAVIS
<input checked="" type="checkbox"/>		COHEN
<input checked="" type="checkbox"/>		ADAMS
<input checked="" type="checkbox"/>		MARTIN
<input checked="" type="checkbox"/>		HOANG
<input checked="" type="checkbox"/>		PENNINGTON
<input checked="" type="checkbox"/>		GONZALEZ
<input checked="" type="checkbox"/>		RODRIGUEZ
<input checked="" type="checkbox"/>		LASTER
<input checked="" type="checkbox"/>		GREEN
	ABSENT	COSTELLO
<input checked="" type="checkbox"/>		BURKS
	ABSENT-OUT OF CITY ON PERSONAL BUSINESS	NORIEGA
<input checked="" type="checkbox"/>		BRADFORD
<input checked="" type="checkbox"/>		CHRISTIE
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CAPTION PUBLISHED IN DAILY COURT  
REVIEW  
DATE: FEB 12 2013



**EXHIBIT "A"**

**PROJECT PLAN AND REINVESTMENT ZONE FINANCING PLAN FOR THE  
HARRISBURG ZONE**

**TAX INCREMENT REINVESTMENT ZONE NUMBER TWENTY THREE  
CITY OF HOUSTON**

**HARRISBURG ZONE**

Project Plan and Reinvestment Zone Financing Plan

January 25, 2013

REINVESTMENT ZONE NUMBER TWENTY THREE, CITY OF HOUSTON, TEXAS  
HARRISBURG ZONE –Project Plan and Reinvestment Zone  
Financing Plan

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### **Introduction:**

Houston's East End: The East End is a district located on the eastern side of Houston's central business district and stretches from the eastern side of downtown to the Port of Houston. The area includes the site of Harrisburg, an early Texas trading post and the seat of government for the Republic of Texas in 1836. Historically, the area was primary destination for German, Italians and Mexican American immigrants. The Second Ward and Magnolia Park, two of Houston's oldest neighborhoods, are located in the East End. During the 1990's the area experienced a dramatic increase in Hispanic population, primarily south of Buffalo Bayou, within the Denver Harbor, Clinton Park, Second Ward, Eastwood, Harrisburg, Pecan Park, Park Place, Meadowbrook, Magnolia and Lawndale neighborhoods.

Today the area contains the highest concentration of petrochemical industries in the City. Also located in the East End are a significant number of industrial brownfield sites and several inactive landfills. Land use patterns could be characterized by areas consisting of large tracts of underdeveloped parcels, abandoned dock lands, industrial properties, railroads, and various commercial uses located throughout and amid single family residential areas.

Currently the East End is entering in to an unprecedented time in its history. Perhaps the largest single investment, public or private is currently being made in the East End. METRO has broken ground on the Harrisburg light rail alignment. The light rail line will run from the Magnolia Transit Center into downtown Houston and link the East End into the City's light rail transit system. In the future, East End residents will be able to use the light rail to gain access other activity centers within greater the Houston region, conversely residents from other districts of the City will be able to travel to the East End and visit eateries, attend cultural events and tour its historic neighborhoods.

### **Reinvestment Zone Number Twenty Three, Harrisburg Zone:**

Reinvestment Zone Number Twenty Three, City of Houston, Texas, also known as the Harrisburg Tax Increment Reinvestment Zone (TIRZ) is a proposed public finance tool intended to encourage investment and stimulate commercial and residential development in the East End. Essential to making the rail successful will be having the pedestrian infrastructure in place for the riders as they are traveling to or from the rail. To achieve this in the East End significant investments in infrastructure are required. Tax increment financing provides a means to leverage the potential growth in the area to fund this investment. This was recognized by the Texas Legislature when it made the inclusion of land on which a transit rail system is being constructed a single, stand-alone condition for the creation of a tax increment reinvestment zone (ref. Texas Tax Code 311.005(a-1)). As will be addressed further in this Proposed East End Tax Increment Zone Project and Financing Plan, the proposed tax increment zone does include the Harrisburg Light Rail Line. Other conditions within the proposed TIRZ include additional necessary conditions required for the creation of a reinvestment zone (ref. Texas Tax Code 311.005(1)). These include, but are not limited to 311.005(1)(A) a substantial number of substandard, slum, deteriorated, or deteriorated structures; 311.005(1)(B) the predominance of defective or inadequate sidewalk or street layout; 311.005(1)(C) faulty lot layout in relation to size, adequacy, accessibility, or usefulness; 311.005(1)(D) unsanitary or unsafe conditions; 311.005(1)(E) the deterioration of site or other improvements; and 311.005(1)(H) conditions that endanger life or property by fire or other cause.

The following photographs are taken within the proposed boundaries of the TIRZ and document existing conditions (See Figures 1 thru 6).



*Figure 1 (Left): Dilapidated structure, vicinity of Sampson and Harrisburg;  
Figure 2 (Right): Missing sidewalk at Harrisburg (future light rail alignment).*



*Figure 3 (Left): Vacant lot along Harrisburg adjacent to future light rail alignment.  
Figure 4 (Right): No sidewalks at Texas and Lockwood.*



*Figure 5 (Left): Illegal Dumping on North Velasco.  
Figure 6 (Right): Undeveloped parcel on North Velasco with Downtown skyline in background.*

The Project and Reinvestment Zone Financing Plan will create an investment tool for new construction and the redevelopment of the area. The proposed TIRZ will help finance approximately \$128 million of improvements and services needed to support the repositioning and revitalization of the East End. Those improvements include:



- Design and construction of public utilities including water, wastewater and storm water systems;
- Design and construction of major and minor roadways and streets including improvements/enhancements;
- Cultural and Public Facility Improvements;
- Parks and Recreational Facilities;
- and Economic Development.

During its 30-year life, the TIRZ expenditures will be funded by tax increment funds, assuming a City tax rate of \$0.63875 per \$100 valuation and a participation rate of 100% for the first ten years of the Zone, 90 % for the subsequent ten years of the Zone, and a maximum of 80% for the remaining ten years of the 30 year term of the Zone. If the City later determines to issue bonds for the TIRZ, additional City Council approval will be necessary. New projected development opportunities will focus on, strengthening the character of residential and commercial properties, improve and diversify the housing product type offered in the area and increase the stability and desirability of the East End's neighborhoods.

#### **Project Plan:**

At approximately 1,600 acres, the proposed TIRZ is comprised of four principal areas:

- The Harrisburg Light Rail Corridor;
- A significant portion of the Second Ward centered around the Jensen/Navigation/Canal intersection stretching to the North York and North Sampson Couplet;
- Undeveloped/underdeveloped land immediately adjacent to the Buffalo Bayou; and
- Commercial/warehouse properties stretching from the Hughes Tool site east to the Gus Wortham Golf Course.

As shown in the Existing Land Use Map, uses with the proposed boundaries of the Zone are predominately commercial (31%), parks and open space (21%), vacant land (15%), and industrial (9%). Over the 30-year life of the TIRZ, it is anticipated that a significant amount of underdeveloped and vacant land will be developed into commercial or residential (single-family and multi-family) uses. Anticipated land uses are proposed to consist of parks and open space (28%), commercial (25%), mixed use development (15%), and public/institutional (10%).

The improvements proposed as the goals of the Harrisburg TIRZ are as follows:

#### **Goal 1: Infrastructure Improvements**

Public streets and public utility systems are required to create an environment that will stimulate private investment in retail, residential, multi-family and commercial developments. Construction of key streets and utility systems will be undertaken to enhance the level of service in the area, improve functionality, replace aged facilities, and increase aesthetics. Potential projects include public utility and roadway improvements along the METRO Harrisburg transit alignment and intersection reconfiguration and improvements on Navigation and Jenson. All roadway improvements will be integrated with the street reconstruction programs of the City of Houston, TxDOT, METRO and others as needed, and where possible include elements not included by those programs. Attention will be placed on the leveraging of TIRZ monies through the funding of elements not addressed by the CIP programs of sister agencies.

*Goal 2: Utilize the present street grid as a framework to create pedestrian-friendly safe environments through the reconstruction of streets and sidewalks, with ample lighting and streetscape amenities.*

Streetscape enhancements are required to create an environment that will help stimulate investment in retail, residential, and commercial developments. Enhanced streetscapes components will include: sidewalks, lighting, signage, street trees, landscaping, benches and other pedestrian amenities. The reconstruction of key streets and major thoroughfares will enhance the level of service in the area. The construction of sidewalk systems including ADA complaint ramps and other treatments will improve pedestrian safety, enhance the visual environment and provide connectivity and reinforce the existing community framework of small urban neighborhoods.

Goal 3: Complementing the revitalization activities proposed to occur along the METRO Harrisburg Mass Transit Alignment.

METRO funding of public transit systems along the Harrisburg alignment can be complemented by TIRZ activities including the funding of streetscapes, right-of-way acquisition, and related transit improvements. The METRO Harrisburg alignment includes proposed stations on York, Lockwood, Altic, Cesar Chavez, and Magnolia. Stations at these locations could spur redevelopment while benefiting existing businesses. According to the METRO Solutions Final Environmental Impact Statement, placement of new stations would likely result in “redevelopment of vacant parcels and intensification of land uses.” The placement of METRO transit stations in the East End will be of particular importance, economically speaking, both from the consumer and the merchant’s perspectives. The present development schedule for the Harrisburg line calls for construction completion by Fall of 2013.

Goal 4: Economic Development

With substantial amounts of vacant land within the TIRZ, in order to stimulate and accelerate redevelopment within the TIRZ, the TIRZ would seek to fund economic development programs that would directly incentivize private enterprise that affect the TIRZ and serve as a catalyst for other business developments. Examples of how the program would be used include funding for business development and retention, business loss mitigation, economic development grants to catalyze investments, such as Agreements under Chapter 380 of the Texas Local Government Code, and matching grants to provide leverage for other economic development funds, such as state enterprise projects, state economic development bank funds and new market tax credit allocations. In cases such as those described in this section, an appropriate economic development program would be proposed by the City and/or the TIRZ and approved by both the TIRZ and City Council.

Goal 5: The reinforcement of pedestrian-attractive retail developments and mix-density uses with other compatible uses and activities along the Harrisburg, Canal, Wayside, Lockwood, Navigation, and the York/Sampson Corridors.

The retention and expansion of retail and commercial developments along Harrisburg, Canal, Wayside, Lockwood, Navigation, and the York/Sampson is of key importance to the successful redevelopment of the area. The provision of base level retail functionality is essential to the continued expansion of residential projects in the area. In particular, it is envisioned to develop Harrisburg into a key arterial/town center, through the implementation of a program resulting in an enhanced pedestrian environment with an emphasis on parking, lighting, street trees, landscaping, wide sidewalks, public art and adequate pedestrian amenities.

Goal 6: Parks and Related Amenities.

The creation of pedestrian-friendly safe environments, public open green space, access and egress improvements, dedication of public benefit easements, pedestrian bridges and other enhancements.

Proposed redevelopment and upgrades to public green space with the boundaries of the Harrisburg TIRZ, parks, and other appropriate recreational facilities include acquisition of new parkland along Buffalo Bayou, improvements and upgrades to Guadalupe Park and the development of pocket parks in neighborhoods adjacent to the Canal and Harrisburg corridors.

Goal 7: Cultural, Public Facilities, Affordable Housing and Historic Preservation

Increasing cultural and public facilities as well as cultural arts centers such as the Talento Bilingue de Houston and museums, historic preservation efforts and affordable housing for East End residents and its workforce is an important public policy goal. TIRZ funds may be leveraged with private, public, and non-profit developers to integrate affordable housing initiatives into ongoing and proposed redevelopment projects within the TIRZ. Also anticipated are the acquisition and rehabilitation of historic structures through the preservation and restoration of historic structures in the area through acquisition/resale and/or rehabilitation of roofs and other structural elements. These projects collectively with improved infrastructure and new fire, police, library, public health facilities, and cultural/community centers will lead to improved security and enhance the quality of life for existing and new residents and businesses.

**Project Plan and Reinvestment Zone Financing Plan for the Zone.**

**A. Project Plan**

Existing and Proposed Uses of Land (Texas Tax Code §311.011(b)(1)): Map 1 reflects the existing land and proposed land uses within the boundaries of the TIRZ. The existing and proposed land uses include single-family residential, multi-family residential, commercial, office, industrial, public and institutional, transportation and utility, park and open spaces, undeveloped and agricultural production land uses.

Proposed Changes of Zoning Ordinances, Master Plan of Municipality, Building Codes, and other Municipal Ordinances (Texas Tax Code §311.011(b)(2)): All construction will be performed in conformance with the City's existing rules and regulations. There are no proposed changes to any City ordinance, master plan, or building code.

Estimated Non-Project Cost Items (Texas Tax Code §311.011(b)(3)): The non-project costs reflect in part costs that the Greater East End Management District is making both capital and operation and maintenance investments in the Zone. The District has an annual budget of approximately \$1.7 million and has received grants totaling over \$5 million to implement the East End Livable Centers Project. An estimated \$400 million will be spent by the Metropolitan Transit Authority on the Harrisburg/East End Light Rail Alignment. At a distance of approximately 3 miles, the new alignment will include 5 Transit Stations.

Method of Relocating Persons to be Displaced, if any, as a Result of Implementing the Plan (Texas Tax Code §311.011(b)(4)): It is not anticipated that any residents will be displaced by any of the projects to be undertaken in the Zone.

**B. Reinvestment Zone Financing Plan**

Estimated Project Costs (Texas Tax Code §311.011(c)(1)): Exhibit 1 (attached) is a detailed listing of the

proposed public improvement and administrative project costs. The dollar amounts are approximate and may be amended from time to time by City Council. The financing cost are a function of project financing needs and will vary with market conditions, and thus may vary significantly from what is shown in on the Exhibit 1.

Proposed Kind, Number, and Location of all Proposed Public Works or Public Improvements to be Financed in the Zone (Texas Tax Code §311.011(c)(2)): These details are provided throughout the Plan.

Economic Feasibility (Texas Tax Code §311.011(c)(3)): Numerous economic feasibility studies have been completed for the area that includes the proposed TIRZ. These include the following:

- *Houston Neighborhood Market Drill Down*, Social Compact for the City of Houston et al, February 2002.
- *East Houston Sector Study*, City of Houston Planning and Development Department, April 2005;
- *Strategic Vision Project*, Greater East End Management District, September 2006;
- *Greater East End Guide to Developer and Business Incentives and Assistance*, Greater East End Management District, February 2007;

Collectively, these reports document the economic potential within the boundaries of the proposed TIRZ. Exhibit 2 and Exhibit 3 constitute revenue estimates for the Zone. The Project Plan estimate total project cost of \$128,908,488. The Zone and the City find and determine that the Plan is economically feasible.

Estimated Amount of Bond Indebtedness; Time When Related Costs or Monetary Obligations Incurred (Texas Tax Code §311.011(c)(4), §311.011(c)(5)): Notes or bonds may be issued by the proposed TIRZ. Future note and bond issues will occur as tax increment revenues allow. The value and timing of these future notes or bonds issues will correlate to debt capacity as derived from the revenue and project schedules attached herein, and by actual market conditions for the issue and sale of such notes and bonds. The TIRZ will explore other financing methods, as well, including developer agreement, financing and collaboration with other entities for grant funding and partnerships.

Methods and Sources of Financing Project Costs and Percentage of Increment from Taxing Units Anticipated to Contribute Tax Increment to the Zone (Texas Tax Code §311.011(c)(6)): Methods and sources of financing include the issuance of notes and bonds, as well as collaboration with developers and other entities for grant funding and partnerships. TY 2011 is the proposed base year for the Zone, TY 2040 is the scheduled termination date. As outlined in Exhibit 2 and Exhibit 3, the proposed base year will be TY 2011 and the scheduled terminate date will be TY 2040, using an estimated collection rate of 95%, and a City of Houston contribution of 100% of the TY 2011 tax rate of \$0.63875/\$100 of assessed valuation for the first ten years of the Zone , 90% for the subsequent ten years of the Zone, and a maximum of 80% for the remaining ten years of the 30 year term of the Zone, approximately \$72 million of increment is estimated to be generated by the TIRZ for use in funding Project Costs. The projected \$72 million in increment is deemed to be a conservative figure. Should other jurisdictions wish to participate, this Plan will allow such participation now or at a later date. In accordance with the provisions of Texas Tax Code Chapter 311, if a jurisdiction wishes to participate in the Zone, its participation will be evidenced by an Interlocal Agreement with the City and the Zone stating the share of property taxes that will be deposited in the tax increment fund on an annual basis.

Current Total Appraised Value of Taxable Real Property (Texas Tax Code §311.011(c)(7)): The current total appraised value of taxable real property in the Zone is \$369,721,736.

Estimated Captured Appraised Value of Zone During Each Year of Existence (Texas Tax Code §311.011(c)(8)): The estimated captured appraised value of the Zone during each year of its 30-year duration is set forth in Exhibit 2.

Zone Duration (Texas Tax Code §311.011(c)(9)): The TIRZ analysis reflects a 30 year duration and will terminate on December 31, 2040, or on an earlier date as adopted by a subsequent City Council Ordinance, or when all project costs, tax increment bonds, and bond interest have been paid, and all contractual obligations completed.

## MAPS AND EXHIBITS



## Exhibit 1 – Estimated Project Costs

**Project Cost Amendments:** The following table includes the approved project cost.

		Estimated Costs
<b><u>Infrastructure Improvements:</u></b>		
<b>Public Utility Improvements</b>		
Public Utilities		\$ 8,000,000
	<b>Total Public Utility Improvements</b>	<b>\$ 8,000,000</b>
<b>Roadway and Sidewalk Improvements</b>		
Roadway, Streets, Sidewalks, Lighting, ROW Acquisition		\$ 55,500,000
Light Rail Underpass Infrastructure Improvements		\$ 2,500,000
	<b>Total Roadway and Sidewalk Improvements</b>	<b>\$ 58,000,000</b>
	<b>Total Infrastructure Improvements</b>	<b>\$ 66,000,000</b>
<b><u>Other Project Costs:</u></b>		
<b>Cultural and Public Facilities Costs</b>		
Cultural and Public Facilities		\$ 20,000,000
	<b>Total Cultural and Public Facilities</b>	<b>\$ 20,000,000</b>
<b>Parks and Recreational Facilities</b>		
Parks and Recreational Facilities		\$ 15,300,000
	<b>Total Parks and Land Acquisition</b>	<b>\$ 15,300,000</b>
<b>Economic Development</b>		
Economic Development		\$ 10,000,000
	<b>Total Land Acquisition</b>	<b>\$ 10,000,000</b>
<b>Affordable Housing</b>		
Affordable Housing		\$ 150,000
	<b>Total Affordable Housing Costs</b>	<b>\$ 150,000</b>
<b>TIRZ Creation</b>		
TIRZ Creation		\$ 150,000
	<b>Total TIRZ Creation</b>	<b>\$ 150,000</b>
<b>TIRZ Management</b>		
TIRZ Administration and Management		\$ 1,500,000
	<b>Total TIRZ Management</b>	<b>\$ 1,500,000</b>
<b>Financing Costs</b>		
Financing Costs		\$ 12,000,000
	<b>Total Financing Costs</b>	<b>\$ 12,000,000</b>
<b>City Administration</b>		
City Administration Costs		\$ 3,808,488
	<b>Total Financing Costs</b>	<b>\$ 3,808,488</b>
	<b>Total Other Project Costs</b>	<b>\$ 62,908,488</b>
<b>PROJECT PLAN TOTAL</b>		<b>\$ 128,908,488</b>

# City of Houston Existing & Proposed Landuse Map TIRZ #23 Map

## Legend:

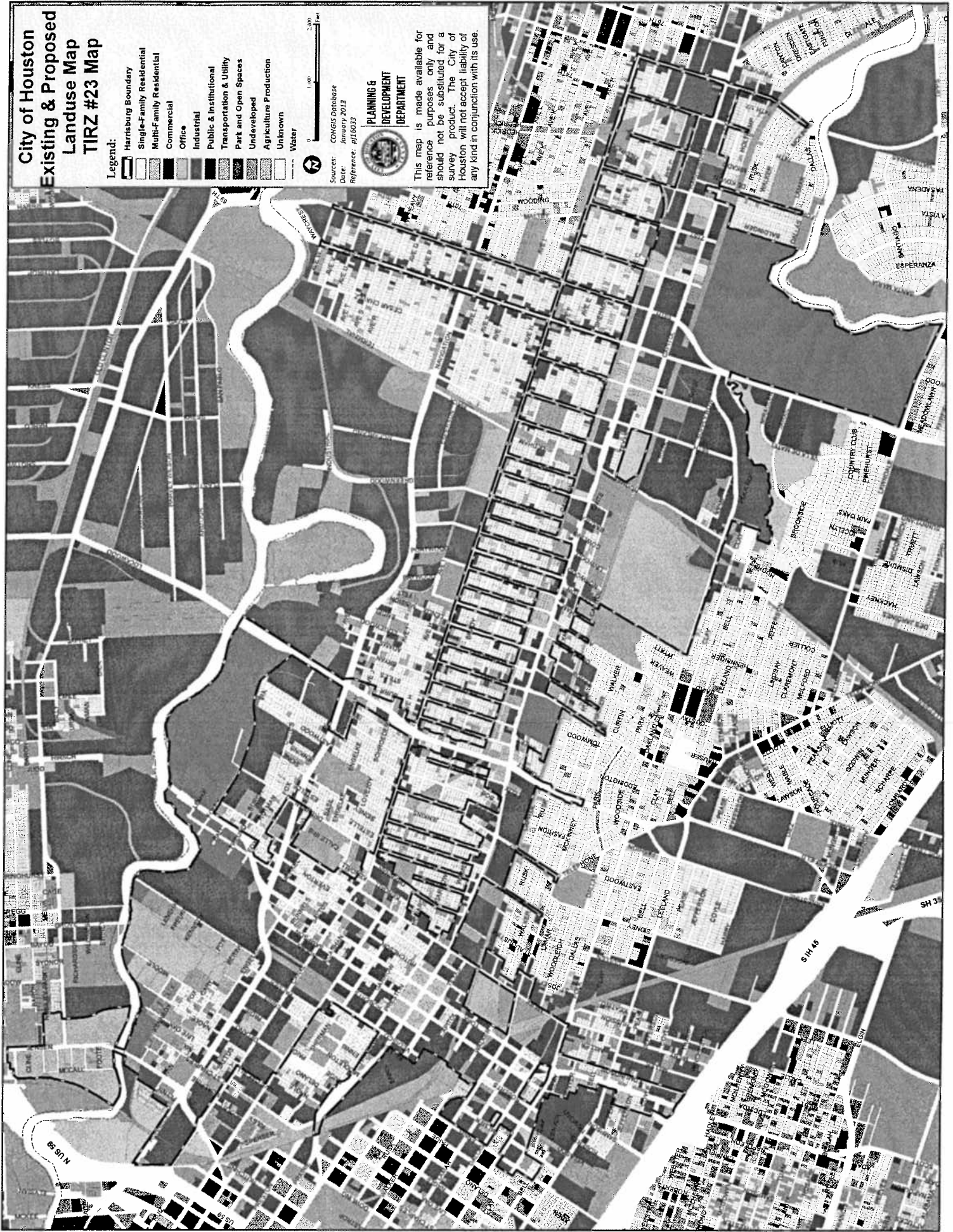
- Harrisburg Boundary
- Single-Family Residential
- Multi-Family Residential
- Commercial
- Office
- Industrial
- Public & Institutional
- Transportation & Utility
- Park and Open Spaces
- Undeveloped
- Agriculture Production
- Unknown
- Water



Sources: COMGIS Database  
Date: January 2013  
Reference: 9/18/03



This map is made available for reference purposes only and should not be substituted for a survey product. The City of Houston will not accept liability of any kind in conjunction with its use.



## Exhibit 2 – Net Revenue Schedule

Tax Year (1)	Increment Revenue		Net Revenue (Increment Revenue less Transfers)
	City	Transfers	
2011	\$ -	\$ -	\$ -
2012	\$ 112,176	\$ 5,609	\$ 106,567
2013	\$ 290,642	\$ 14,532	\$ 276,110
2014	\$ 538,712	\$ 26,936	\$ 511,777
2015	\$ 799,186	\$ 39,959	\$ 759,227
2016	\$ 1,072,684	\$ 53,634	\$ 1,019,050
2017	\$ 1,359,857	\$ 67,993	\$ 1,291,864
2018	\$ 1,661,388	\$ 83,069	\$ 1,578,318
2019	\$ 1,977,996	\$ 98,900	\$ 1,879,096
2020	\$ 2,310,434	\$ 115,522	\$ 2,194,912
2021	\$ 2,284,318	\$ 114,216	\$ 2,170,102
2022	\$ 2,499,492	\$ 124,975	\$ 2,374,518
2023	\$ 2,725,425	\$ 136,271	\$ 2,589,154
2024	\$ 2,962,655	\$ 148,133	\$ 2,814,522
2025	\$ 3,211,746	\$ 160,587	\$ 3,051,159
2026	\$ 3,473,291	\$ 173,665	\$ 3,299,627
2027	\$ 3,747,914	\$ 187,396	\$ 3,560,519
2028	\$ 4,036,268	\$ 201,813	\$ 3,834,455
2029	\$ 4,339,040	\$ 216,952	\$ 4,122,088
2030	\$ 4,656,950	\$ 232,848	\$ 4,424,103
2031	\$ 4,436,228	\$ 221,811	\$ 4,214,416
2032	\$ 4,747,780	\$ 237,389	\$ 4,510,391
2033	\$ 5,074,910	\$ 253,745	\$ 4,821,164
2034	\$ 5,418,396	\$ 270,920	\$ 5,147,476
2035	\$ 5,779,056	\$ 288,953	\$ 5,490,103
2036	\$ 6,157,750	\$ 307,887	\$ 5,849,862
2037	\$ 6,555,378	\$ 327,769	\$ 6,227,609
2038	\$ 6,972,888	\$ 348,644	\$ 6,624,243
2039	\$ 7,411,273	\$ 370,564	\$ 7,040,709
2040	\$ 7,871,577	\$ 393,579	\$ 7,477,998
	\$ 104,485,409	\$ 5,224,270	\$ 99,261,139

**Notes:**

- (1) Redevelopment Authority is scheduled to terminate in Tax Year 2040
- (2) Base Year is Tax Year 2011
- (3) Projected Value for Tax Years 2011 to 2020 increases at an annual average of 5.00% and for Tax Years 2021 to 2040 at an annual average of 5.00%
- (4) Collection Rate for Tax Years 2011 to 2040 at 95%
- (5) Contribution Rate for Tax Years 2011 to 2040 is 75%
- (6) Transfers is 5% of Increment Revenue

# Exhibit 3 – Transfer Schedule

Tax Year(1)	Base Value (2)	Projected Value (3)	Captured Appraised Value	Collection Rate (4)	Tax Rate	Gross Increment Revenue	Contribution Rate (5)	Increment Revenue	Transfers (6)	Net Revenue (Increment Revenue less Admin Fees)
2011	\$ 369,721,736	\$ 369,721,736	\$ -	95.00%	0.63875	\$ -	100.00%	\$ -	\$ -	\$ -
2012	\$ 369,721,736	\$ 388,207,823	\$ 18,486,087	95.00%	0.63875	\$ 112,176	100.00%	\$ 112,176	\$ 5,609	\$ 106,567
2013	\$ 369,721,736	\$ 417,618,214	\$ 47,896,478	95.00%	0.63875	\$ 290,642	100.00%	\$ 290,642	\$ 14,532	\$ 276,110
2014	\$ 369,721,736	\$ 458,499,125	\$ 88,777,389	95.00%	0.63875	\$ 538,712	100.00%	\$ 538,712	\$ 26,936	\$ 511,777
2015	\$ 369,721,736	\$ 501,424,081	\$ 131,702,345	95.00%	0.63875	\$ 799,186	100.00%	\$ 799,186	\$ 39,959	\$ 759,227
2016	\$ 369,721,736	\$ 546,495,265	\$ 176,773,549	95.00%	0.63875	\$ 1,072,684	100.00%	\$ 1,072,684	\$ 53,634	\$ 1,019,050
2017	\$ 369,721,736	\$ 593,820,049	\$ 224,098,313	95.00%	0.63875	\$ 1,359,857	100.00%	\$ 1,359,857	\$ 67,993	\$ 1,291,864
2018	\$ 369,721,736	\$ 643,511,052	\$ 273,789,316	95.00%	0.63875	\$ 1,661,388	100.00%	\$ 1,661,388	\$ 83,069	\$ 1,578,318
2019	\$ 369,721,736	\$ 695,686,604	\$ 325,964,868	95.00%	0.63875	\$ 1,977,996	100.00%	\$ 1,977,996	\$ 98,900	\$ 1,879,096
2020	\$ 369,721,736	\$ 750,470,934	\$ 380,749,198	95.00%	0.63875	\$ 2,310,434	100.00%	\$ 2,310,434	\$ 115,522	\$ 2,194,912
2021	\$ 369,721,736	\$ 787,994,481	\$ 418,272,745	95.00%	0.63875	\$ 2,538,131	90.00%	\$ 2,284,318	\$ 114,216	\$ 2,170,102
2022	\$ 369,721,736	\$ 827,394,205	\$ 457,672,469	95.00%	0.63875	\$ 2,777,214	90.00%	\$ 2,499,492	\$ 124,975	\$ 2,374,518
2023	\$ 369,721,736	\$ 868,763,915	\$ 499,042,179	95.00%	0.63875	\$ 3,028,250	90.00%	\$ 2,725,425	\$ 136,271	\$ 2,589,154
2024	\$ 369,721,736	\$ 912,202,111	\$ 542,480,375	95.00%	0.63875	\$ 3,291,839	90.00%	\$ 2,962,655	\$ 148,133	\$ 2,814,522
2025	\$ 369,721,736	\$ 957,812,217	\$ 588,090,481	95.00%	0.63875	\$ 3,568,607	90.00%	\$ 3,211,746	\$ 160,587	\$ 3,051,159
2026	\$ 369,721,736	\$ 1,005,702,828	\$ 635,981,092	95.00%	0.63875	\$ 3,859,213	90.00%	\$ 3,473,291	\$ 173,665	\$ 3,299,627
2027	\$ 369,721,736	\$ 1,055,987,969	\$ 686,266,233	95.00%	0.63875	\$ 4,164,349	90.00%	\$ 3,747,914	\$ 187,396	\$ 3,560,519
2028	\$ 369,721,736	\$ 1,108,787,367	\$ 739,065,631	95.00%	0.63875	\$ 4,484,743	90.00%	\$ 4,036,268	\$ 201,813	\$ 3,834,455
2029	\$ 369,721,736	\$ 1,164,226,736	\$ 794,505,000	95.00%	0.63875	\$ 4,821,156	90.00%	\$ 4,339,040	\$ 216,952	\$ 4,122,088
2030	\$ 369,721,736	\$ 1,222,438,073	\$ 852,716,337	95.00%	0.63875	\$ 5,174,389	90.00%	\$ 4,656,950	\$ 232,848	\$ 4,424,103
2031	\$ 369,721,736	\$ 1,283,659,976	\$ 913,838,240	95.00%	0.63875	\$ 5,545,285	80.00%	\$ 4,436,228	\$ 221,811	\$ 4,214,416
2032	\$ 369,721,736	\$ 1,347,737,975	\$ 978,016,239	95.00%	0.63875	\$ 5,934,725	80.00%	\$ 4,747,780	\$ 237,389	\$ 4,510,391
2033	\$ 369,721,736	\$ 1,415,124,874	\$ 1,045,403,138	95.00%	0.63875	\$ 6,343,637	80.00%	\$ 5,074,910	\$ 253,745	\$ 4,821,184
2034	\$ 369,721,736	\$ 1,485,881,117	\$ 1,116,159,381	95.00%	0.63875	\$ 6,772,995	80.00%	\$ 5,418,396	\$ 270,920	\$ 5,147,476
2035	\$ 369,721,736	\$ 1,560,175,173	\$ 1,190,453,437	95.00%	0.63875	\$ 7,223,820	80.00%	\$ 5,779,056	\$ 288,953	\$ 5,490,103
2036	\$ 369,721,736	\$ 1,638,183,932	\$ 1,268,462,196	95.00%	0.63875	\$ 7,697,187	80.00%	\$ 6,157,750	\$ 307,887	\$ 5,849,862
2037	\$ 369,721,736	\$ 1,720,093,129	\$ 1,350,371,393	95.00%	0.63875	\$ 8,194,222	80.00%	\$ 6,555,378	\$ 327,769	\$ 6,227,609
2038	\$ 369,721,736	\$ 1,806,097,785	\$ 1,436,376,049	95.00%	0.63875	\$ 8,716,109	80.00%	\$ 6,972,888	\$ 348,644	\$ 6,624,243
2039	\$ 369,721,736	\$ 1,896,402,674	\$ 1,526,680,938	95.00%	0.63875	\$ 9,264,091	80.00%	\$ 7,411,273	\$ 370,564	\$ 7,040,709
2040	\$ 369,721,736	\$ 1,991,222,808	\$ 1,621,501,072	95.00%	0.63875	\$ 9,839,471	80.00%	\$ 7,871,577	\$ 393,579	\$ 7,477,998
								\$ 104,485,409	\$ 5,224,270	\$ 99,261,139

## Notes:

- (1) Redevelopment Authority is scheduled to terminate in Tax Year 2040
- (2) Base Year is Tax Year 2011
- (3) Projected Value for Tax Years 2011 to 2020 increases at an annual average of 8.19% and for Tax Years 2021 to 2040 at an annual average of 5.00%
- (4) Collection Rate for Tax Years 2011 to 2040 at 95%
- (5) Contribution Rate for Tax Years 2011 to 2040 is 75%
- (6) Transfers is 5% of Increment Revenue

## Appendix G

### Community Relations Plan



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# Community Relations Plan: Brownfields Redevelopment Program

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Brownfields Redevelopment Program  
City of Houston

**PREPARED FOR:**  
City of Houston

**E2MANAGETECH**  
COLLABORATE | INNOVATE | DELIVER



# COMMUNITY RELATIONS PLAN

Brownfields Redevelopment Program  
City of Houston

Prepared for:

City of Houston  
Brownfields Redevelopment Program  
1002 Washington Ave, Office 339  
Houston, Texas 77002

September 6, 2016

Approved by:



Danielle Getsinger, PG  
Project Manager



Daryl Hernandez, PE  
Principal

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## **Section 1 Introduction**

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### **1.1 Environmental Protection Agency Brownfields Program**

The Environmental Protection Agency’s (EPA) Brownfields Program was started in 1995 and has grown into a proven, results-oriented program that has changed the way contaminated properties are perceived and redeveloped (U.S. EPA, October 2006). The EPA defines a brownfield as a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant (U.S. EPA, October 2006). There are many challenges unique to brownfields redevelopment, including environmental liability concerns, financial barriers, cleanup considerations, and reuse planning. Through federal grant funding, the EPA’s Brownfields Program removes some of these barriers and serves as an empowerment tool for land and community revitalization.

The EPA’s Brownfields Program is part of the EPA’s larger Land Revitalization Program, which promotes the integration of sustainable reuse considerations into all cleanup and redevelopment decisions (U.S. EPA, June 2016). EPA’s Land Revitalization Program fosters strong partnerships with communities to address environmental issues, promote sustainable redevelopment, and encourage public involvement in area-wide planning to enhance economic development, create green jobs, and maximize the efficiency of site cleanup efforts (U.S. EPA, June 2016).

### **1.2 City of Houston’s Brownfields Redevelopment Program**

The mission of the City of Houston’s Brownfields Redevelopment Program, referred hereto as the “Program,” is to restore urban land, natural resources, and historically and culturally significant landmarks into valued community assets. The Program seeks to revitalize core neighborhoods, catalyze sustainable economic growth, and ensure a safe and clean environment. The Program operates in conjunction with other City departments to advance the Mayor’s agenda, improve quality of life for Houston residents, and create thriving, livable neighborhoods in this world-class city.

The Program has established priority criteria that serve as a guide for selecting sites to receive environmental assessment or cleanup funding. These priorities, listed below, are based on objectives of both the EPA’s Land Revitalization Program and City initiatives.

- **Protection of Human Health and the Environment** - A top priority of the Program is to reduce and control the potential exposure of toxic chemicals to human and ecological receptors. Additionally, the Program prioritizes supporting projects that protect human health and the environment by promoting clean energy, improved air quality, and building infrastructure resilient to severe weather, natural disasters, and sea-level rise.
- **Environmental Justice** – The cleanup of contaminated sites in neighborhoods disproportionately impacted by multiple brownfields sites will greatly reduce the adverse human health and environmental impacts in these neighborhoods.
- **Community Involvement & Partnerships** – Continuous community involvement and stakeholder engagement is essential for a successful brownfields redevelopment program and may help to ensure or



accelerate land revitalization efforts. Partnerships with private and other public entities are also a proven strategy for leveraging multiple resources to ensure project success.

- **Urban Smart Growth Principles** – Smart growth strategies are central to brownfields redevelopment and help communities grow in ways that expand economic opportunity while protecting human health and the environment (U.S. EPA, May 2016). Examples of urban smart growth principles include improved access to affordable housing, increased transportation options, lower transportation costs, expansion of permeable surfaces and green space, and walkable and bike-able neighborhoods.
- **Results Oriented** – Brownfields funding will prioritize projects with tangible outcomes to maximize the Program’s influence on progress towards neighborhood revitalization or restoration efforts. Brownfields funding serves as a catalyst for economic growth by removing barriers to redevelopment and economic improvement projects, revitalizing tax delinquent properties, and creating jobs through construction and new business. Outcomes from Brownfields funded projects should have measurable accomplishments, such as, number of jobs created, tax revenue generated, open space created, amount of contaminants removed, acres of wetlands restored, etc.

Since 2005, the City’s Program has redeveloped over 75 sites and has restored more than 3,000 acres of City land to beneficial use. As a result, more than \$5 million in tax revenue has been generated, over \$800 million in investment for cleanup and redevelopment has been leveraged, and over 4,000 new jobs have been created or retained. Brownfields redevelopment projects in the City include Minute Maid Park, Discovery Green, Hobby Center for the Performing Arts, and the Downtown Aquarium. Other notable projects include senior housing complexes, townhomes, Wildcat Golf Course, neighborhood parks, and commercial mixed use or industrial properties.

### **1.3 Grant Funding for 2014 - 2017**

In 2014, the City was awarded two EPA Brownfields Assessment grants totaling \$400,000 for use on sites impacted or potentially impacted by hazardous substances and/or petroleum products. Grant funding will be used for area-wide inventory, due diligence property assessments, cleanup planning, and community outreach activities in the target area, which is defined as the City’s Greater East End. The East End begins along the eastern edge of Downtown, is bisected by Buffalo Bayou, and extends east to the Port of Houston. Neighborhoods of the East End include the Second Ward, Magnolia Park, Harrisburg/Manchester, Lawndale/Wayside, and a portion of Gulfgate Pine Valley. The East End community is a highly urbanized area where large numbers of minorities and low-income individuals and families live and work.

This Community Relations Plan was created under the 2014-2017 Assessment Grant and focuses specifically on the East End. Within the past ten years, this area has become a focus of revitalization efforts because of its historical and cultural significance to the City. The Greater East End Management District (GEEMD), which was formed by the Texas Legislature in 1999 to function as a tool for economic development and revitalization in the area, has established and prioritized the goal of increasing commercial and residential investment throughout the community. Other GEEMD goals are outlined in the 2011 Greater East End Livable Centers Master Plan (Master Plan), dated February 28, 2011. The Master Plan identifies the following key goals for the East End to encourage sustainable development:

- Redevelopment of underutilized areas with infill/mixed-use strategies;



- Revitalize neighborhoods;
- Improve access while reducing the need for mobility;
- Maintain and develop infrastructure;
- Protect and encourage parks/greenspace;
- Attract employment opportunities;
- Minimize and mitigate human and ecological exposure to industrial contaminants;
- Raise the quality of life for residents of the East End.

By focusing brownfields redevelopment efforts on the East End, the City aims to support projects aligned with both GEEMD's Master Plan and the City's Program priorities. The City intends to find other similar initiatives and funding opportunities during community stakeholder engagement and area-wide inventory activities.

#### **1.4 Community Relations Plan: Purpose**

Community and stakeholder engagement is a top priority for both the EPA and the City. Successful brownfields redevelopment projects are rooted in strong coordination among stakeholders, including local communities, government organizations, private parties, and non-profit organizations (U.S. EPA, October 2006). Local stakeholders and communities have a unique perspective on brownfields in their area, adverse health impacts to citizens, neighborhood blight, redevelopment strategies, and the best use and marketability of properties. By engaging with the community and key stakeholders, the City can make better decisions regarding the distribution of funding and identifying opportunities for successful redevelopment projects. Furthermore, engagement with stakeholders and the community at the beginning of brownfields projects can help to enable or accelerate cleanup and redevelopment (U.S. EPA, October 2006).

The purpose of this Community Relations Plan is to serve as a guide for engaging community stakeholders in Houston's East End. The following are key objectives of the plan:

1. Educate and inform stakeholders about Brownfields funding and Program opportunities and projects;
2. Develop an understanding of what is important to stakeholders and affected communities;
3. Solicit comments and concerns regarding the assessment and cleanup strategies for the target area and site-specific projects;
4. Obtain information relevant to property histories, environmental issues, and redevelopment opportunities.

## **Section 2 Stakeholders**

---

The City recognizes the importance of engaging with community stakeholders to align Brownfields funding with the objectives of community revitalization projects. Property owners, residents, public-sector stakeholders, and other parties have interests in brownfields cleanup and redevelopment. Typically, the more involved participants are in initial planning, the smoother the project planning process (U.S. EPA, October 2006).

Table 1, below, was adapted from the EPA document, *Anatomy of Brownfield Redevelopment*, published in October 2006, and has been modified for this Community Relations Plan to identify the roles and interests of key stakeholders in the East End.



**Table 1 – Roles and Interests of Stakeholders in East End Communities**

Stakeholders	Examples	Role	Interest
Property Owners	<ul style="list-style-type: none"> <li>- Homeowners</li> <li>- Business Owners</li> <li>- Land/Building Owners</li> <li>- Developers</li> </ul>	Sell or develop the property	<ul style="list-style-type: none"> <li>- Fair market value</li> <li>- Increasing property values</li> <li>- Management and understanding of environmental liability</li> </ul>
Public-Sector Stakeholders	<ul style="list-style-type: none"> <li>- GEEMD</li> <li>- Buffalo Bayou Partnership</li> <li>- Greater Houston Partnership</li> <li>- City Departments</li> <li>- U.S. Department of Housing and Urban Development (HUD)</li> <li>- U.S. EPA</li> <li>- U.S. Department of Transportation (DOT)</li> </ul>	Offer guidance regarding redevelopment of the property from a community and economic development perspective	<ul style="list-style-type: none"> <li>- Revitalization of blighted properties</li> <li>- Generation of economic growth and increased tax revenue</li> <li>- Removal of redevelopment barriers</li> <li>- Positive perception of neighborhoods to attract investment</li> <li>- Livability of neighborhoods</li> </ul>
Private-Sector Stakeholders	<ul style="list-style-type: none"> <li>- Universities</li> <li>- Affordable Housing Non-Profits</li> <li>- Urban Farming Non-Profits</li> <li>- Other Non-Profits</li> </ul>	Provide resources to develop the property	<ul style="list-style-type: none"> <li>- Revitalization of blighted properties</li> <li>- Improved property values</li> <li>- Access to transit options</li> <li>- Access to affordable housing</li> <li>- Creation of greenspace</li> </ul>
Residents and Citizens	<ul style="list-style-type: none"> <li>- Individuals</li> <li>- Super-Neighborhoods</li> <li>- Registered Civic Groups</li> </ul>	Provide guidance, insight, and a unique perspective for development	<ul style="list-style-type: none"> <li>- Safe, healthy, and clean environment</li> <li>- Livability principles</li> <li>- Sustainable investments</li> <li>- Economic growth</li> <li>- Access to jobs, transit, and commerce</li> </ul>

*Note- Table modified from Roles and Interest of Participants Table, U.S. EPA, October 2006 Anatomy of Brownfield Redevelopment.*

## Section 3 Outreach Strategies and Tactics

---

There are a variety of strategies and tactics available to effectively communicate important information about the City's Program and site-specific projects to community stakeholders. However, commonly used communication tools may not be appropriate for Houston's East End. The following sections evaluate strategies and tactics aligned with characteristics and demographics of the East End communities in order to achieve the goals of the Community Relations Plan.

### 3.1 Important Considerations for the Greater East End

As with any urban revitalization effort, there are a variety of interests, opinions, and ideas from stakeholders of how the area should be redeveloped. For example, the East End includes prime real estate located just east of Downtown. Luxury condominiums and townhomes are currently under construction, changing the original texture of this historic neighborhood. The new construction has created job growth and stimulation of the East End's economy. The introduction of the new light-rail transit system has also sparked investment interest of underserved and underutilized areas. Some stakeholders see this as quality of life improvement to current residents while others see it as an investment opportunity for a higher income demographic.

The City's outreach strategies and tactics should take into consideration the complexities associated with urban revitalization of low-income and underserved neighborhoods. When evaluating stakeholder interests, the City should favor those that align with the Program's priorities. For example, the Buffalo Bayou Partnership intends to use Brownfields funding to support the expansion of green space and cleanup of heavy industrial pollution along the Buffalo Bayou. In comparison, a private developer may use Brownfields funding to build luxury townhomes, which may create jobs, but would exacerbate the affordable housing problem in that neighborhood. The City's communication strategy should target stakeholders whose projects will align with the Program's priorities; however, at the same time, be fair and inclusive of all stakeholders' opinions.

Strategies and tactics should also consider the demographics of the target audience. The East End has a large population of Hispanic residents; therefore, all communications should be in English and Spanish and in non-technical terms that can be understood by a broad audience. Residents of the East End also have limited access to internet so communication channels must include posting flyers in public spaces and community centers. Other forms of traditional advertising should also be considered. Additionally, the East End's Super Neighborhoods and other community-based organizations are very active with residents. Communications should filter through these groups to leverage the groups' credentials as trusted allies for community interests and their ability to effectively reach the target audience. The City should consider holding public meetings at locations associated with community-based organizations.

There are many public entities, non-profits, and grass-roots community organizations already working to revitalize the East End. For instance, the GEEMD is invested in community improvement projects aligned with their 2011 Master Plan and the Buffalo Bayou Partnership is planning park space and biking trails along the Buffalo Bayou through the East End. In addition, the Super Neighborhoods are working with citizens every day to improve quality of life for residents. As these organizations are well engrained with the culture of the East End neighborhoods, the City's outreach efforts should take advantage of the progress these groups have made. Partnerships are key to effectively communicating and engaging with community stakeholders. Strategies and tactics for community outreach through partnerships is presented in more detail in the following sections.



### **3.2 Summary of Strategies and Tactics**

The strategies and tactics, outlined in Table 2, below, are designed specifically for engagement with the community stakeholders in the East End based on demographics and stakeholder interests. Strategies and tactics should serve as a guide for engaging with the communities, creating messaging, and communicating with the target audience and it can be used for general communications or site-specific outreach. The strategies presented in Table 2 focus on leveraging community partnerships, inspiring participation, and creating messaging appropriate for the target audience. The tactics presented in Table 2 are examples of ways to implement the strategies and meet outreach objectives.

**Table 2 – Community Relations Strategies and Tactics**

Community Relations Objectives	Strategies	Tactics	Target Audience
1. Educate and inform stakeholders about Brownfields funding and Program opportunities and projects	<ul style="list-style-type: none"> <li>- Create appropriate messaging for target audience</li> <li>- Communicate in variety of ways to reach broader audience</li> <li>- Leverage partnerships</li> </ul>	<ul style="list-style-type: none"> <li>- Develop materials in English and Spanish</li> <li>- Conduct Public Meetings</li> <li>- Conduct Key Stakeholder Meetings</li> <li>- Host Brownfields Workshops</li> <li>- Display posters and flyers in public spaces</li> <li>- Use traditional advertisement</li> <li>- Develop a Program website</li> <li>- Leverage social media tools</li> <li>- Develop a web-based community engagement platform</li> <li>- Create a volunteer program</li> <li>- Create a Brownfields Designation Program</li> <li>- Develop and conduct presentations on Brownfields topics</li> </ul>	<ul style="list-style-type: none"> <li>- All stakeholders</li> </ul>
2. Develop an understanding of what is important to stakeholders and affected communities	<ul style="list-style-type: none"> <li>- Get to know the Community</li> <li>- Create various opportunities for participation and engagement</li> <li>- Understand economic improvement initiatives</li> <li>- Understand stakeholder interests</li> <li>- Leverage partnerships</li> </ul>	<ul style="list-style-type: none"> <li>- Participate in Community events</li> <li>- Conduct public meetings</li> <li>- Conduct key stakeholder meetings</li> <li>- Develop web-based community engagement platform</li> </ul>	<ul style="list-style-type: none"> <li>- Public-sector stakeholders</li> <li>- Private-sector stakeholders</li> <li>- Community members</li> </ul>

Community Relations Objectives	Strategies	Tactics	Target Audience
3. Solicit comments and concerns regarding the assessment and cleanup strategies for the target area and site-specific projects	<ul style="list-style-type: none"> <li>- Create clear communication pathways for stakeholders</li> <li>- Inspire participation</li> <li>- Leverage partnerships</li> </ul>	<ul style="list-style-type: none"> <li>- Conduct public meetings</li> <li>- Conduct key stakeholder meetings</li> <li>- Host Brownfields Workshops</li> <li>- Display posters and flyers</li> <li>- Use traditional advertisement</li> <li>- Develop a Program website</li> <li>- Leverage social media tools</li> <li>- Develop a web-based community engagement platform</li> <li>- Create a volunteer program</li> <li>- Create Brownfields Designation Program</li> <li>- Develop and conduct presentations on Brownfields topics</li> </ul>	<ul style="list-style-type: none"> <li>- Private/public stakeholders</li> <li>- General public</li> <li>- Property and business owners</li> <li>- Community-based organizations</li> </ul>
4. Obtain information relevant to property histories, environmental issues, and redevelopment opportunities	<ul style="list-style-type: none"> <li>- Inspire participation</li> <li>- Leverage partnerships</li> </ul>	<ul style="list-style-type: none"> <li>- Conduct public meetings</li> <li>- Conduct key stakeholder meetings</li> <li>- Conduct interviews</li> <li>- Develop a web-based community engagement platform</li> <li>- Create a Brownfields Designation Program</li> </ul>	<ul style="list-style-type: none"> <li>- Citizens</li> <li>- Business owners</li> <li>- Community-based organizations (ie. Super Neighborhoods)</li> </ul>

Most of the tactics in Table 2 are common in EPA Brownfields Community Relations Plans; however, a few tactics are unique to this plan. Tactics unique to this Community Relations Plan are discussed in further detail below.

### 3.2.1 Key Stakeholder Meetings

The East End has multiple stakeholders who are engaged in neighborhood revitalization campaigns. These stakeholders, including the GEEMD, Buffalo Bayou Partnership, Super Neighborhoods, and non-profits like New Hope Housing, have created master plans, studied real estate markets, and have started implementing actions aligned with their vision for the East End. To better understand current revitalization efforts, the City should meet with select or “key” stakeholders. These meetings should be focused on building partnerships, gathering information, and finding opportunities for potential brownfields projects.

### 3.2.2 Interviews

Individual residents are often overlooked as resources for understanding the history of a property. However, residents of neighborhoods that have been impacted by brownfields sites or former industrial properties have proven to be invaluable for identifying environmental issues associated with a site or operation. Once the City has selected properties for assessment or cleanup planning, the investigation should include an effort to interview nearby residents or neighbors.

### 3.2.3 Focus Group Education

There may be instances when the City will want to educate a select group of community stakeholders. Topics of interest may include “What you need to know about environmental hazards in your neighborhood,” “Tips for applying for Brownfields Funding,” “Understanding your environmental liability,” “Ideas for brownfields reuse,” or “Is urban farming on contaminated properties safe?”

### 3.2.4 Web-Based Community Engagement Platform

The City should explore the feasibility and effectiveness of a web-based community engagement platform, similar to the one hosted by the City of Austin - <http://speakupaustin.org/>. A website like the City of Austin’s requires maintenance, dedication to creating content, tracking public comments, and responding where appropriate. This type of website may be applicable to a larger City program, like Public Works or the Mayor’s Office. The City should explore interest in creating this website jointly with City partners.

### 3.2.5 Social Media

Social media accounts like Twitter, LinkedIn, Facebook, and blogs can be powerful communication tools; however, they require dedication to developing content and posting frequently to maintain and captivate followers. At this time, the City’s Brownfields Program should not solely invest in a social media campaign. Rather, the Program should create content to post on other social media accounts with already well-established followings. Some examples include the Mayor’s office, the Public Works and Engineering Department, GreenHoustonTx.gov, and Houston Tomorrow.

### 3.2.6 Presentations

The City has a number of active professional trade groups and organizations that host presentations relevant to City initiatives, market economies, development trends, and other projects affecting communities and business in Houston. For example, Houston Tomorrow hosts a speaker series called My Houston 2040, which offers a networking and discussion opportunity around visionary speakers who present their vision for Houston in 2040. The Congress for New Urbanism, Urban Land Institute, Texas Association of Environmental Professionals,



Greater Houston Partnership, BisNow, NAIOP Commercial Real Estate Development Association, and others also offer luncheons, speaker events, and happy hours to educate and inform their members of programs and opportunities like the City's Brownfields Program.

### **3.2.7 Volunteer Opportunities**

Volunteer programs already exist with organizations serving the East End. The City should look for opportunities to involve volunteers with the Brownfields Program. Currently, the Program is not established enough to warrant its own volunteer program; however, there may be ways to use volunteers from other programs to support community outreach. For example, volunteers could hand out or post flyers, inform neighbors and colleagues of public meetings, and translate messaging from English to Spanish.

### **3.2.8 Brownfields Designation Program**

To bring awareness to the Brownfields Program and its role in community revitalization, the City should consider creating a logo that can be placed in the window of buildings or on plaques or posters on brownfields redevelopment projects. This designation would serve as an opportunity to give recognition and credit to the landowner or business owner who redeveloped the property.

## **Section 4    Community Relations Tracking and Implementation**

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Documenting community relations efforts is important for evaluating the performance of strategies and tactics, reporting to the EPA, and tracking key information. Google Forms is a great tool to track outreach events. One advantage of using Google Forms that each form submission is automatically tracked on a Google Spreadsheet. The following figure, Figure 1, illustrates an example Google Form.

This Community Relations Plan is intended to guide the City’s efforts to engage with community partners and stakeholders to effectively implement Brownfields program initiatives in such a way that maximizes benefits to the communities it serves. Not only will this Community Relations Plan serve the overall Program, it should be used as a framework for designing project specific community relations plans. Through active community engagement, the Brownfields program will better serve communities of Houston and in turn, the communities will help to drive the focus of Program efforts.



**Figure 1 – Example Google Form for tracking community outreach activities**

## Houston Brownfields Community Relations

Tracking community relations events associated with the City of Houston's Brownfields Redevelopment Program.

**1. Participants**

---

**2. Date of Event**

---

*Example: December 15, 2012*

**3. Time of Event**

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*Example: 8:30 AM*

**4. Tactic**  
*Mark only one oval.*

- ☐ Public Meetings
- ☐ Stakeholder Meetings
- ☐ Interviews
- ☐ Brownfields Workshops
- ☐ Posters and Flyers
- ☐ Traditional Advertisement
- ☐ Program Website
- ☐ Traditional Advertisement
- ☐ Social Media
- ☐ Web-based community engagement platform
- ☐ Presentations
- ☐ Volunteer Opportunities
- ☐ Brownfields Designation Program

**5. Goals Supported**  
*Check all that apply.*

- ☐ #1 - Educate and Inform
- ☐ #2 - Gain Understanding / Research
- ☐ #3 - Elicit Feedback
- ☐ #4 - Site Specific Research

**6. Notes**

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**7. Follow Up**

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## **Section 5**   **References**

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U.S. Environmental Protection Agency (EPA). October 2006. Anatomy of Brownfields Redevelopment: Brownfields Solutions Series.

U.S. EPA. June 2008. EPA Brownfields Assessment Grants – Assessment Coalitions.

U.S. EPA. April 2011. Brownfields Federal Program Guide.

U.S. EPA. July 2011. OSWER Land Revitalization Program brochure.

U.S. EPA. Updated May 2016. Smart Growth, <https://www.epa.gov/smartgrowth>.

U.S. EPA. Updated June 6, 2016. Land Revitalization, <https://www.epa.gov/land-revitalization>.

HUD-DOT-EPA. Partnership for Sustainable Communities, <https://www.sustainablecommunities.gov/>

## Appendix H

### Greater East End Livable Centers Master Plan

## GREATER EAST END LIVABLE CENTERS MASTER PLAN



Prepared for:

THE GREATER EAST END MANAGEMENT DISTRICT  
HOUSTON, TX

## **The East End Master Plan**

The Greater East End Management District has embarked on an ambitious set of initiatives to redevelop the old Second Ward area of Houston into a sustainable, transit-oriented, walkable, compact and mixed-use urban neighborhood. This area was the focus of the first Livable Centers studies conducted by the Houston-Galveston Area Council. The area also stands to benefit from the construction of METRO's East End light rail line along Harrisburg Boulevard.

## **Community Engagement**

The plan documented here is the result of an extensive public engagement process that involved community groups, area stakeholders and elected officials. As the first stage of the implementation process for the Livable Centers study, a vision and a list of priorities for future development were derived through a series of stakeholder meetings, public workshops, and a planning charrette held in December 2010 and February 2011.

## **Vision Statement**

The Greater East End will be a vibrant, mixed-use, multicultural, and sustainable model for the redevelopment of a historic and strategically located Houston neighborhood. Building on existing assets and infilling with new development, the East End will enhance economic development and sustainable growth by improving streets, infrastructure, and incentivizing transit oriented commercial and residential development.

Navigation Boulevard will serve as the “Main Street” of the revitalized East End and be an active, green, pedestrian-oriented, and transit friendly boulevard that celebrates existing neighborhood culture and destinations, while allowing for future development to transform the surrounding neighborhood from industrial uses into a vibrant, mixed-use neighborhood.

## **Development Potential**

The Master Plan for the East End considers the potential redevelopment of the traditional Second Ward neighborhood (loosely described as the area east of US-59 between Buffalo Bayou and Harrisburg, up to approximately Milby Street) as well as the largely industrial portion of the Fifth Ward that is just north of Buffalo Bayou. Together, this comprises approximately 616 acres of land. Previous studies have identified over 300 acres of vacant and underutilized or obsolete industrial land available for redevelopment. Much of this property is actively being assembled by developers. When developed at urban densities, this area has the potential to add over 1 billion dollars in new value to the City's tax base while creating a vibrant and sustainable urban neighborhood.

## **Implementation**

The District has been able to leverage the light rail construction with a \$5 million AARA stimulus grant to implement streetscape and pedestrian/bicycle mobility improvements to three key corridors: Navigation Boulevard and York and Sampson Streets. The District is actively pursuing funding for a number of other neighborhood enhancement and improvement projects.





Figure 1: Greater East End Livable Centers Master Plan

## The Planning Context

Houston's East End is poised for significant growth in the next few decades. If done properly, this growth could add substantially to the City of Houston's tax base, prosperity, and quality of life. Under current development trends and patterns, however, much of this growth could be diverted to suburban areas beyond the city limits.

Aside from its economic benefits, facilitating and promoting growth in the East End is a sustainable model of development:

- It makes use of existing infrastructure and existing vacant and underdeveloped property.
- It provides for a denser, transit-oriented, pedestrian-friendly, more integrated form of development that reduces vehicle miles traveled through internal trip capture and mobility options.
- It also reduces vehicle miles traveled by being inherently closer to downtown and other regional activity centers.

An overriding theme that emerged from the public engagement process was the importance of developing a long-range master plan to properly frame the context for individual projects and incremental steps, but most importantly, to avoid the drawbacks of haphazard and unplanned redevelopment that have occurred in other areas of the city.

The Master Plan study area comprises about 616 acres. The current estimated population is about 5,100 people. Current commercial uses are predominantly industrial and warehouse uses rather than neighborhood services such as retail.

## Key Elements of the Master Plan

The momentum for redevelopment in the East End is driven by several factors:

1. The advantageous location very close to downtown, with good access to the freeway system.
2. There is a considerable inventory of vacant land, underdeveloped property, and obsolete industrial and warehouse uses.
3. There are several large developers actively assembling property in the area.
4. The general momentum of growth in the greater Houston area.

The Master Plan projects that this area will transition from an industrial/warehouse character to a mixed-use urban neighborhood with denser housing types served by a range of commercial services. The industrial area north of the bayou could be the focus of a significant office concentration. There will also be a certain concentration of destination uses such as museums and restaurants that have a broad attraction and will be centered along Navigation Boulevard. The denser infill types of construction reflect what would be feasible under current and projected property values. Eventual development is projected to include about 7,200 housing units of various types, and as much as 7 million square feet of various commercial uses. The overall net floor area ratio (a measure of development intensity) would be in the range of 1.0, or about 4 to 5 times what it is today. The net increase in taxable value would be in the range of \$1.2 billion, representing annual revenue to the City of about \$7.7 million in ad valorem tax alone.



## Recommendations

A number of infrastructure improvements are necessary for this to occur. Most importantly, the existing street network has to be reinforced, that is, as many links and connections as possible need to be restored in order for the traffic to be properly distributed without causing congestion, and to allow Navigation Boulevard to function as a true “Main Street” rather than simply as a traffic conduit.

Specific recommendations are as follows:

- All future infrastructure improvement projects must consider all modes of transportation, including pedestrians, bicycles, and various forms of transit. This theme is being pursued in the ongoing design work for York and Sampson Streets and Navigation Boulevard.
- Navigation Boulevard should be reconfigured to serve as an urban Main Street, with features such as on-street parking and a high quality pedestrian realm that supports a wide range of street life. Its role as a vehicular thoroughfare has to be de-emphasized and traffic patterns distributed throughout the rest of the street network.
- This will require other network enhancements. Canal and Commerce Streets need to be improved to serve as primary east-west corridors.
- Additional opportunities to cross the railroad tracks should be pursued to improve connectivity to East Downtown and downtown proper.
- A trolley circulator route should be implemented to connect the Convention Center, Minute Maid Park, and Dynamo Stadium with the East End, with service along Navigation Boulevard and the potential Town Center development along Buffalo Bayou near Sampson and York.
- Additional connections to and across Buffalo Bayou will enhance infill development potential and provide feeders to the activity on Navigation Boulevard.
- Development guidelines and incentives should be adopted to promote pedestrian friendly mixed use development that is compatible with the scale and character of the Second Ward.

### A. Planning Context

The greater Houston metropolitan area experiences population growth of approximately one million people every decade. While this is generally regarded as a sign of our economic strength, the implications of continued growth at this rate are sobering. With our prevailing development model of expanding ever outward into undeveloped land, each decade of growth requires an additional 300 square miles of open land to be developed – the Katy Prairie, the coastal wetlands, and the East Texas pine forests are likely to take the brunt of this growth. More roads have to be paved, freeways have to be widened, and, still, commutes will get longer and gasoline more expensive.

Is there a better way? While growth at the metropolitan edge will likely not be slowed substantially, there are significant opportunities for redeveloping existing areas near the downtown. Past experience has shown that there is strong demand for denser, more urban living, but the results so far have frequently been haphazard, uneven, and insensitive to existing community fabric and culture.

The East End is poised to be one of the next redevelopment centers. It is literally in the shadow of downtown, with a great deal of undeveloped and underdeveloped land. Industry is gradually moving out of the area and much of this property is being assembled by the development community. Smaller scale development is already in evidence in the area, and improvements and amenities such as the Harrisburg light rail line and the Dynamo Stadium are likely to make the area even more attractive.

As Houstonians know all too well, it is difficult to execute any sort of coordinated long-range master plan – yet this is precisely what must be done here. The crucial first step is to achieve

broad based community consensus on a master plan vision, a vision that preserves and reinforces existing community assets while allowing for significant development opportunities. Then, a series of public improvement initiatives that support the vision, combined with targeted incentives for private development, can help to guide growth in the appropriate direction. This Master Plan outlines such a long range development scenario.

## B. Guiding Principles

The East End Master Plan is based on ten guiding principles that are discussed below and depicted in diagrammatic form on Figure 2.

Although there are ten principles, they can be grouped into three general topic areas: those that deal with improvements to the street network and traffic pattern, those that promote sustainable development, and those that are concerned with neighborhood character.

**Traffic and Street Pattern.** While the East End Master Plan covers a wide area, it begins by establishing and reinforcing the boulevard that should serve as the area’s Main Street: Navigation Boulevard. (It should be noted that the Master Plan only considers that portion of Navigation west of York Street; more easterly stretches of Navigation may still want to function as a more conventional thoroughfare, at least for the foreseeable future.) Establishing the desired character will require a number of interventions to Navigation itself as well as the surrounding street network:

1. Area traffic patterns have to be adjusted and redistributed so that Navigation no longer functions as a through street, but accommodates slower, local traffic as well as a diverse mix of other functions.
2. Sampson and York are a key couplet of one-way streets that provide access from the heart of the neighborhood to Interstate 10 on the north and Interstate 45 to the south. They should serve as a means of diverting through traffic from Navigation onto alternative routes.

3. Sampson and York should also function as key pedestrian corridors, providing access to the light rail line on Harrisburg.
4. At the west end of Navigation, another north-south connection (to be established) could create a crucial link between Guadalupe Park and the proposed Dynamo stadium. This new connection will also help to strengthen the intermittent access across US 59 into the downtown.
5. In general, the existing street grid needs to be enhanced to distribute traffic, provide greater mobility options for pedestrians, bikes, and vehicles. Canal and Commerce Streets, in particular, have to be strengthened as east-west connectors

Enhancing the surrounding street network will liberate Navigation Boulevard from having to be a primary traffic route and allow it to evolve into a true place, the heart of the neighborhood.

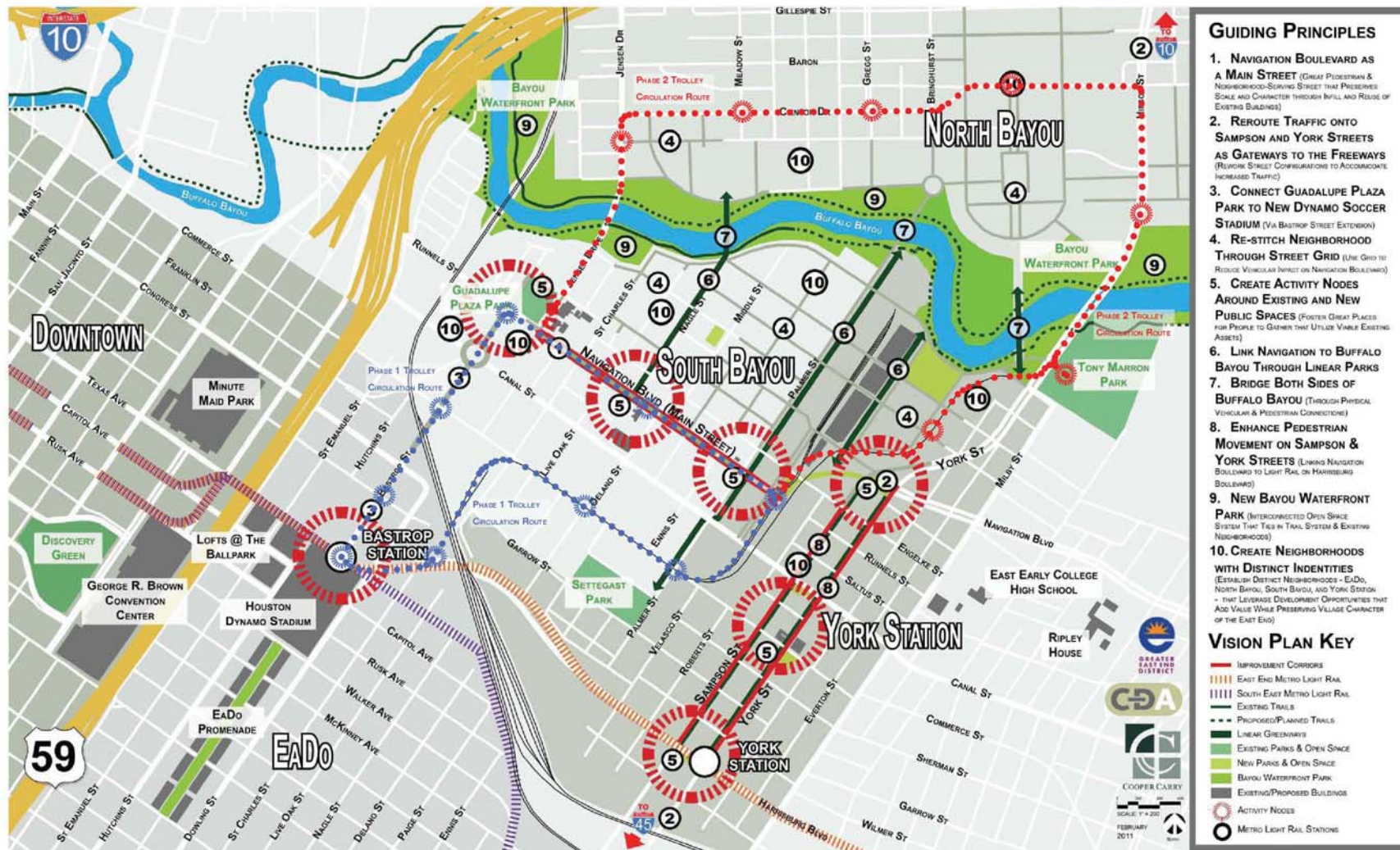


Figure 2: East End Master Plan Guiding Principles

**Sustainable Development.** Several other master Plan principles are intended to highlight and promote principles of sustainable development. This means not only “green” features, but also characteristics of development that are inherently denser, make more efficient use of resources, and reduce vehicular traffic through integration of uses and creating closer and more direct connections. Master Plan principles that help to enhance sustainable goals include:

6. Create activity nodes around existing and new uses. Several existing nodes are already evident. Proceeding from west to east:
  - a. Guadalupe Park and church, Talento Bilingue, and the close proximity to the Bayou provide a concentration of civic uses here.
  - b. The Ninfa’s block is a destination known to virtually all Houstonians, one that could anchor a restaurant and food based node.
  - c. The York/Sampson intersection, with excellent north-south access, is a natural location for a commercial Town Center, with a minor key in museum destinations.
7. Bridge the north and south sides of Buffalo Bayou. The Master Plan anticipates a total of three new bridges across the bayou. Two of them would be pedestrian/bicycle bridges, but one of them, at the extension of Palmer Street, is projected to be a vehicular connection. Interest in creating these connections was expressed by one of the major property owners with holdings on both sides of the bayou, so at least some of the new bridges have a high likelihood of being built. These bridges would be very helpful in creating

additional activity on both sides of the bayou, as well as making the bayou itself more accessible as an amenity.

8. Link Navigation to Buffalo Bayou through linear parks. These linear parks would actually be “green streets,” that is, multi-modal routes that would create a strong connection between the bayou and Navigation Boulevard, to the mutual benefit of both. Navigation Boulevard would benefit from enhanced pedestrian traffic, and the residents of the neighborhood would gain better access to Navigation and the bayou.
9. Create a waterfront park along Buffalo Bayou. Buffalo Bayou presents a singular opportunity to create a signature natural and recreational amenity for the entire East End. The Buffalo Bayou Partnership and others have been instrumental in achieving such improvements in other reaches of the bayou, and this portion is also included in their master plan. The linear park also presents an opportunity for useful open space such as allotment gardens, orchards, local produce, as well as passive park space.

**Neighborhood Character.** Finally, it is a guiding principle of this Master Plan that development should be compatible with the character of the surrounding area. Too many times, extensive redevelopment in Houston is criticized for being insensitive, and out of scale with its surroundings. Providing for appropriate development character will enhance the neighborhood and the value of existing and new development alike.

In an area of this size, the development character will vary as the area varies. In fact, the study area is large enough to create several neighborhoods of distinctive scale and character. Loosely described, there are three primary neighborhood areas: the old industrial area north of Buffalo Bayou, the old Second Ward area south of the Bayou and centered on Navigation Boulevard, and the east downtown area. Of these three, the Second Ward area has the most history and character, and is the one where development should be more sensitive to respecting the existing fabric. For purposes of preparing development projections, these three primary neighborhoods were further subdivided into 9 sub-areas of differing uses and development intensity, as described in the next section.

While neighborhood character is important, it should also be emphasized that accommodating the magnitude of growth expected in the Houston region involves identifying appropriate opportunities for dense infill development. When done properly, density can be a positive attribute, indeed, it is a pre-requisite for concentrating activity and uses enough to create the lively, active, and mixed-use environments characteristic of pedestrian oriented city living. Here, the east downtown area and the north bayou industrial areas are opportunities for significant density, while the area around Navigation should strive to maintain the diverse and multi-cultural character of the existing neighborhood.

### C. Development Program.

A model of the projected development at build-out was prepared to evaluate the potential impacts and benefits of the Master Plan. This analysis is presented in summary form on Table 1, which presents, in tabular form, the expected quantities and mix of development in the various different character areas.

The build-out projections begin by dividing the study area into 8 different sub-areas. These were determined primarily by identifying areas of differing character due to location, surrounding uses and amenities, existing conditions, and development potential. A brief description of each of the sub-areas follows. The numbering corresponds to the sub-areas as shown on Figure 3.

1. Sub-area 1 fronts on Jensen Drive, has convenient access to Interstate 10, and connects across Buffalo Bayou to the Second Ward and, eventually, downtown. This makes it a reasonable location for large format retail uses that would serve the neighborhoods on both sides of the bayou. This type of development is typically low-rise and relies primarily on surface parking, as indicated by the relatively low projections for floor area ratio.
2. Sub-area 2 is currently large parcels of old industrial property that are being (and largely have been) assembled by a relative few development interests. This makes it a prime candidate for high density redevelopment, predominantly residential in character, but with potential for some small scale neighborhood serving commercial uses at ground level. The model assumes mid to high rise

development in stepped form to maximize the southerly views over the bayou and toward downtown.

3. Sub-area 3 is centered on the old Kellogg Brown & Root property, which has several existing office towers in relatively good condition. Building on that core, this area could become a significant concentration of office and other commercial uses, perhaps focused on the clean-tech and next generation energy industries that would benefit from a location close to the port. This area is also large, assembled, and relatively unconstrained to redevelop at fairly high intensity.
4. Sub-area 4 moves to the south side of the bayou, but could have a close relationship to the commercial and office core on the north side, with an existing, and several proposed, bayou crossings. As the crossroads between Navigation Boulevard and the York/Sampson couplet, this would be the potential Town Center development, with a lively and diverse mix of uses that would include residential, commercial, and several civic and destination uses such as museums, parks, and other public attractions. The land use mix is fairly balanced between residential and commercial uses here, but in a low to mid-rise intensity.
5. Sub-area 5 centers on the “Main Street” Navigation corridor, and is intended to build on the existing scale and character of the neighborhood. This is projected to receive small to medium scale infill development compatible with the existing fabric. The Navigation corridor would infill with additional commercial, restaurant, and neighborhood serving uses, while the other areas would be predominantly residential in



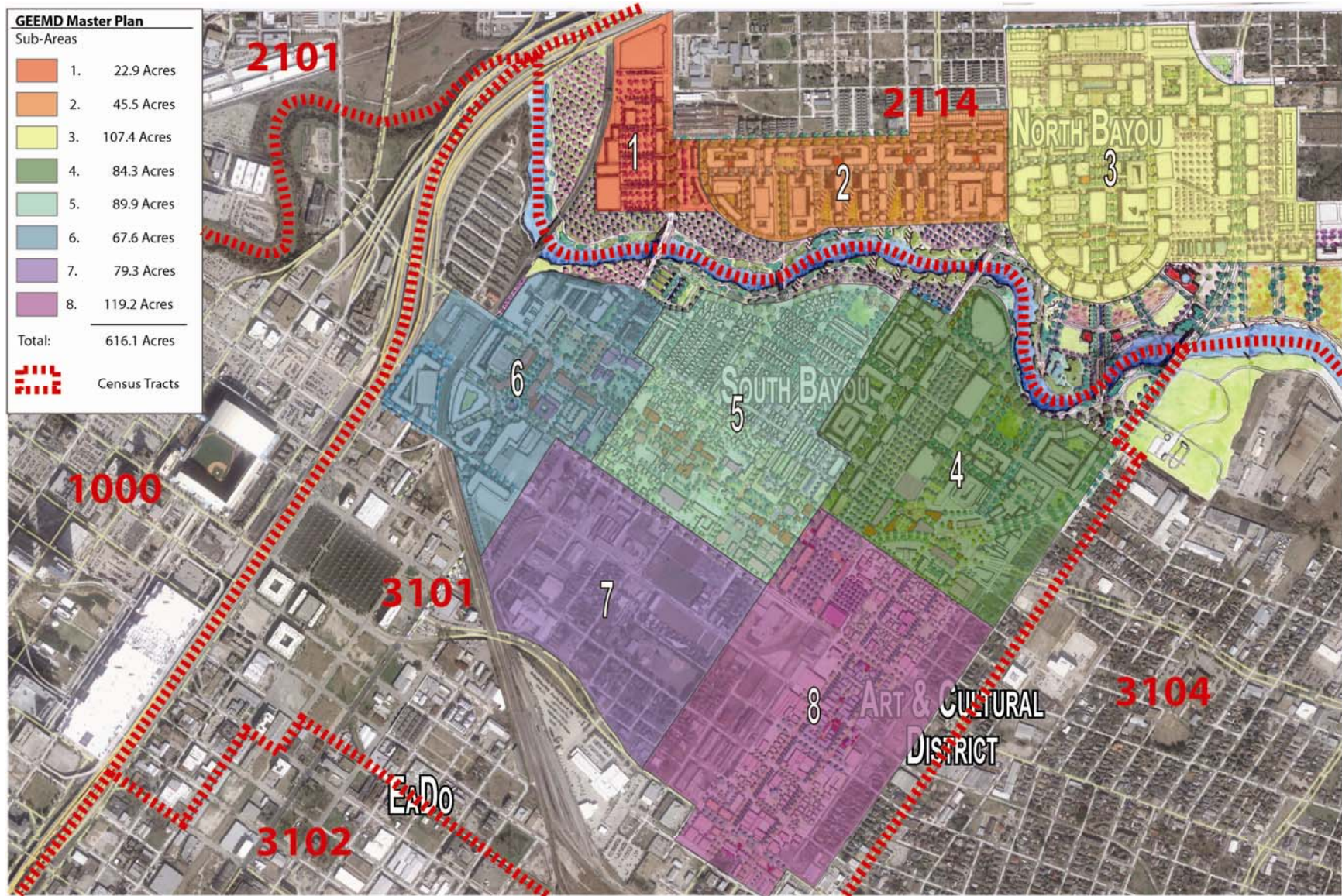


Figure 3: Sub-areas of the East End Master Plan

medium density forms such as townhomes, patio homes, and smaller multi-family building.

current tax rates, this would represent new annual revenue to the City of about \$ 7.7 million annually.

6. Sub-area 6 is another key mixed-use node, acting as a gateway/connector between several other areas, with a diverse range of uses, from civic and parkland to commercial along Jensen and Navigation. There are also several significant sized tracts that are projected to develop with mid-to high density housing.
7. Sub-area 7 is another infill area that would build on the existing character. Canal, Commerce, and Harrisburg are mostly lined with commercial and warehouse uses which could provide support and flex space for the surrounding area, small business incubators, and a build the East End's employment base. There are also opportunities for infill housing in low to medium density forms.
8. Sub-area 8 is the centers on the York and Sampson corridors and encompasses the light rail station at Harrisburg and York. This is another predominantly infill area that could build on the area's significant arts assets with warehouse and studio space, loft residential units, and a range of commercial uses. If a significant site could be assembled, the area near Harrisburg would be a candidate for high-density, transit-oriented mixed-use development.

As shown on Table 1, the eventual projected build-out of the East End would add a substantial amount of development to the City in a close-in, accessible, and sustainable form. The Master Plan presented here proposes between over 7,000 new housing units and about 7 million square feet of commercial space of various kinds, for a total assessed value of about \$1.2 billion. At

Table 1

**Greater East End Management District**  
Projected Development Model

No.	Sub-area Area (acres)	Prevailing Character	Net Area (SF)	Floor Area Ratio	Res/Comm Split	Residential Units	Residential Area (SF)	Commercial Area (SF)	Value
1	22.9	Large format retail, commercial	668,341	0.40	10 / 90	22	26,734	240,603	\$ 29,139,671
2	45.5	High density housing	1,327,927	1.50	90 / 10	1,494	1,792,701	199,189	\$ 128,144,917
3	107.4	Office, clean tech, some housing	3,134,490	1.20	30 / 70	940	1,128,417	2,632,972	\$ 277,088,958
4	84.3	Town Center, mixed use, destination	2,460,312	0.75	40 / 60	615	738,094	1,107,141	\$ 152,539,366
5	89.9	Neighborhood infill, mixed use	2,623,749	0.60	60 / 40	787	944,550	629,700	\$ 137,484,473
6	67.6	Mid to high density housing	1,972,920	1.10	90 / 10	1,628	1,953,190	217,021	\$ 150,139,175
7	79.3	Commercial infill, flex space	2,314,386	0.60	40 / 60	463	555,453	833,179	\$ 124,051,109
8	119.2	Infill housing and commercial, TOD	3,478,876	0.70	65 / 35	1,319	1,582,889	852,325	\$ 199,861,417
	616.1		17,981,002			7,268	8,722,026	6,712,129	\$ 1,198,449,087

## Notes:

1. Net area is calculated as gross area x .67 to account for street right-of-way.
2. Floor Area Ratio is the ratio of gross occupiable area divided by net site area.
3. Value = (Net Area x \$20) + (Residential Area x \$50) + (Commercial Area x \$60) and is assumed to be average assessed value.
4. All dollar figures are in current dollars.

**The Public Planning Process**

In order to ensure that the elements of the East End Master Plan would reflect the goals and desires of the community, an extensive outreach effort was conducted. Ultimately, the success of the plan will depend on its concurrence with the community’s interests as well with the broader goals of the City of Houston and other public entities with an interest in the area.

The outreach involved a variety of methods. A broad overview is provided by a Steering Committee that meets periodically to review the overall course of the project. More detailed and focused discussions are held with a number of individuals and smaller groups to address particular issues and concerns. There are also several larger workshops and presentations that are open to the general public.

**The Steering Committee**

The Project Steering Committee is formed of representatives of all of the key public jurisdictions and community groups that have an interest in the area. Their task is to review the progress of the project at periodic intervals, provide advice and counsel as well as any coordination and liaison needed with their respective entities.

The Steering Committee for the East End Master Plan includes the following members:

D.V. Sonny Flores	GEEMD Board
Bolivar Fraga	GEEMD Board and Ripley House
Carlos Doroteo	Office of Councilmember Gonzales
Richard Smith	City of Houston Public Works

Amar Mohite	City of Houston Planning
Diana Ponce de Leon	City of Houston Planning
Renissa Garza Montalvo	City of Houston Parks
Roberto Trevino	METRO
Arianna Campos	Office of State Rep. Farrar
Gloria Moreno	Second Ward Superneighborhood
Frances Dyess	East End Chamber of Commerce
Matthew Lennon	Houston Arts Alliance
David Corpus	Banco Herencia

In general, the Steering Committee met prior to the larger public workshops. They reviewed the consultants work and provided an opportunity to fine-tune the materials for the public meetings.

The Steering Committee is also instrumental in identifying and defining issues that will need further coordination and support from entities such as the City of Houston, METRO, etc.

**Stakeholder Meetings**

Stakeholder meetings are focused discussions between members of the consultant team and various area stakeholders: individuals or small groups that have a particular interest in the area. Stakeholders include area residents, business owners, developers and other large property owners, as well as public officials. These meetings allow for in-depth discussions about the study area, and are usually centered on a topic relevant to the stakeholder, whether it is a residential developer, a group of restaurant owners, or people with an interest in parks and open space.

A series of stakeholder meetings was conducted on Thursday, 9 December through Saturday, 11 December. Additional follow up meeting were also held to continue the discussions or to pursue



particular initiatives. It is anticipated that several of these initiatives will develop into ongoing and recurring efforts.

Meetings were held with the following individuals and groups:

Yolanda Navarro-Black, longtime resident, business owner (Villa Arcos taqueria on Navigation) and community activist.

Canal Place Housing, a single room occupancy housing project developed by a local non-profit, New Hope Housing.

Neil Morgan, owner of Ninfa's and retired developer. Ninfa's is a Mexican restaurant on Navigation that is a Houston institution and a popular area destination.

Ernie Cockrell, Pinto Realty Partners, owners of a significant amount of vacant and old industrial property on both sides of Buffalo Bayou.

Renissa Garza-Montalvo, Senior Project Manager, City of Houston Parks Department.

Alan Atkinson, developer and owner of several significant parcels in the study area.

Karen Elsen, Fraga Pre-K school on York

Gloria Moreno, Jessica Hulsey, Jack Sheeks, representatives of the Second Ward Superneighborhood

Museums: Jesse Hernandez (WWII Museum,) John Kendall (Maritime Museum,) Phil Scheps (Railroad Museum.) All of these are actively pursuing facilities in the East End; some have already acquired a site.

City of Houston officials. Andy Icken, Chief Development Officer, Mark Loethen, Jeff Weatherford, Tom Davis, Traffic and Public Works.

York Street property owners. Most of these have established businesses, two have warehouse properties for personal collections, some are assembling property for redevelopment.

Urban Harvest, promotes local food production and distribution through farmers markets.

Juan Hernandez, owner of Dona Maria Restaurant on Navigation.

Yolanda Schaefer, manager of Merida Restaurant on Navigation.

These meetings generally lasted between forty-five minutes to one hour. The discussions covered general area wide issues as well as any specific concerns or questions.

#### **Streets as Places Training Session**

A key aspect of the Master Plan is the changing of perceptions about streets. Many of the existing regulations and standards governing street design are focused on maximizing their use for vehicular traffic.

A growing body of research, as well as actual completed projects in a number of other jurisdictions, is shifting the emphasis of street design to a more comprehensive and multi-use approach. Streets are designed not just for vehicle traffic, but to make it safer and more enjoyable for pedestrians, bicycles, and various

forms of transit. Complete streets and context sensitive solutions are two terms used to describe these new design approaches.

In order to help disseminate information and promote these design approaches, a one-day training workshop was held, designed specifically for transportation professionals. The session was attended by staff from the City of Houston Public Works Department, the Texas Department of Transportation, METRO, as well as several consultants.

#### **Public Meetings and Workshops**

There are also several public meetings that are open to anyone interested. These meetings are widely publicized and intended to allow anyone the opportunity to attend, become informed about the project, and offer their ideas and suggestions. These meetings are held at various stages of the project:

- An initial public meeting is held before the design process gets underway. This meeting is specifically intended to solicit ideas from the public. This is done through a series of interactive exercises designed to present issues and opportunities, promote discussion and generate

dialogue. The meeting begins with a presentation that sets the context and provided background information as well as food for thought. Then, the participants are split into smaller groups, with each group having a specific focus area to study. The groups make a visit to their particular area, note the conditions and potential, and then report back to the larger group.

- A follow up workshop is held about two months later. By this time, the design team has had a chance to review and consolidate the public workshop results, and develop some schematic concepts. The intent of this meeting is to present the ideas to the public and promote an interactive dialogue, note any concerns or areas that need revision.
- Another similar workshop is held once the design has advanced further along. By this time, the design direction is well established, and the meeting is an opportunity to confirm the concepts and present further detail for discussion.

The vision for the East End outlines a number of individual improvements and projects. Many of them are already underway, and have existing momentum and ongoing funding to continue. Coordinating these various efforts in pursuit of a common vision will be the key to achieving the Master Plan goals of a revitalized East End. The Greater East End Management District is already taking the lead in managing and coordinating these various activities.

The many individual projects and activities that will contribute to the improvement of the East End will be completed by both the public and the private sectors. This section will outline a number of the key initiatives, as well as define some of the areas that will require further effort, coordination, and funding.

### **A. Public Improvements**

Public improvements will form the framework for growth and development. The Master Plan defines a number of improvements that will be required to enhance mobility, create the potential for private development, and facilitate quality, sustainable growth. The public improvements being planned and implemented can be grouped into several broad categories, as described below:

#### **Streetscape Improvements**

Streetscape improvements will further a number of the master plan goals simultaneously:

- Improving the overall street network and area mobility.

- Enhancing pedestrian and bicycle mobility, and providing better pedestrian access to transit.
- Making the area more attractive to private investment.
- Providing for on-street parking to add to the area wide parking supply and relieving the demands on private development.
- Providing public open space for the programming of community amenities such as street markets, outdoor dining, and public art.
- Generally improving the attractiveness and safety of the public realm.

The first stage of streetscape improvements has been funded by a stimulus grant and design work is underway. This project will provide improvements along the York and Sampson corridors, as well as an enhanced level of treatment along Navigation Boulevard.

A more detailed description of this first stage of improvements can be found later in this section of the Master Plan.

An enhanced level of streetscape amenities is also being provided in conjunction with the construction of the East Line of the METRO light rail transit system along Harrisburg Boulevard. The District has partnered with METRO to provide additional streetscape and sidewalk improvements, over and above the standard treatment being provided as part of METRO's scope. Improvements being funded by the District include street trees set in decorative tree grates, brick paver accents around trees and curb ramps, and special accents intended to reinforce the “brand” of the East End as a special district. This includes cast bronze medallions set into the sidewalk near street intersections, cast



stone blocks identifying the names of streets, and brick paver patterns based on the GEEMD logo.

### **Transportation Alternatives**

The more modes of transport are supported in an area, the greater the potential for a lively mix of uses and a variety of experiences for residents, business owners, and visitors alike.

**Light Rail.** The largest and most important of these alternative transportation projects is, of course, the previously mentioned East End light rail line, currently under construction along Harrisburg Boulevard. This will provide the East End with direct access to a regional transportation network, as well as direct access into downtown and the numerous visitor amenities on the east end of downtown, such as the Convention Center, the sports venues, and Discovery Green.

The east end rail line will terminate at the Magnolia transit center, and, consequently, will provide service traversing the entire Master Plan study area. A stop will be located near the York Street intersection, underscoring the importance of the York/Sampson pair in the pedestrian/bicycle circulation network.

**Bike lanes and bike trails.** The East End is already served by several bike routes. Some are dedicated bike trails, while most are integrated into existing streets as shared use lanes or bike routes. As part of the City’s upcoming overlay project on Sampson Street, GEEMD will be able to provide for re-striping of the pavement to designate a dedicated bike lane. Other bike routes should be considered to continue to strengthen the network. For example, the proposed redesign of the Navigation Boulevard

cross-section would accommodate a traffic lane wide enough to serve as a shared use lane with the ability for vehicles to safely pass bicycles.

**Walkability improvements.** Enhanced pedestrian amenities are integral to many of the streetscape improvements described elsewhere in the Master Plan. Wider sidewalks, curb ramps, additional landscaping and shade trees, pedestrian level lighting, and enhanced bus stops will all serve to create better and more functional pedestrian facilities. Additionally, the expected development of additional restaurants, museums, retail establishments, and, of course, housing, will provide attractive destinations for pedestrians.

**Trolley Circulator.** With the advent of a true light rail system, as well as the existing major attractions in East Downtown, the potential for a local circulator to connect the rail stops and the major destinations with the new Navigation “Main Street” is a natural. GEEMD was successful in obtaining funding to study the possibility of such a service, and the study will get underway shortly. Whether this system is rubber tire or on rails, how frequent, routing, etc., will all be considered in the scope of the study.

## Public Space Programming

Functional and attractive streetscapes are a good start, but it takes actual street life and activities to make public spaces truly successful. The GEEMD has been instrumental in orchestrating and supporting the efforts of several area assets in creating an enhanced public realm:

- A number of groups interested in quality nutrition is addressing the lack of availability of fresh, quality foods in the area. The effort is a multi-pronged one, including production, preparation, packaging, and marketing. With the potential for creating a number of job opportunities, this is an economic development tool in addition to providing a community need.
- The enhanced pedestrian promenade along Navigation Boulevard would be a natural site for street markets. This would be an ideal site for the marketing of local food production noted above, and could also be used to improve the quality of festivals and events held by the Guadalupe Church.
- Several of the restaurants along Navigation Boulevard could benefit from enhanced opportunities for sidewalk café service.
- The provision of on-street parking is a convenience for area visitors, has a traffic calming effect on the vehicular flow, and supports the neighboring businesses.
- A number of opportunities for public art provide yet another way to animate the public spaces, while creating opportunities for area artists.

While many of the improvements listed above would be targeted along the Navigation pedestrian promenade, these strategies can

be applied virtually anywhere. For example, several existing businesses and uses along York and Sampson would benefit from such enhancements as better bus shelters, bike racks, and benches.

## Wayfinding

A successful urban district must make it easy for people to find their way around. Directional signage should serve vehicular traffic as well as pedestrians and cyclists.

Besides the basic tasks of identifying destinations and directing people to them, a good wayfinding program can serve to enhance the image and “brand” of an area. Elements such as gateways can serve to announce a special district, while interpretive elements can provide information about points of interest, historic significance, and add educational or artistic interest.

## Support for Private and Non-Profit Initiatives

GEEMD is actively assisting several groups that are already located in the study area, or looking to relocate to the area. Some of these groups offer the potential of creating visitor attractions that would enhance the value and character of the area.

**Museums.** Several museums are in various stages of development. The World War II museum has acquired a building and is in the process of building out their exhibit spaces. The Railroad Museum has also identified a site, as has the Maritime Museum. Several interests are also studying the potential for an antique car museum, drawing on several private collections already located in the area.

While the museums have, up to now, been operating independently and have selected sites in different portions of the study area, the opportunity exists for a cohesive “museum district” experience to become a feature of the East End. A thematic program, reinforced by wayfinding and common promotion and marketing, would help reinforce this concept. GEEMD was successful in receiving a grant to undertake such a study and has recently commenced the process.

Opportunities for the use of public space. The East End has several significant, but currently underutilized open and park spaces. Buffalo Bayou extends for several miles through the area. While there are ambitious, long range plans for its enhancement, the bayou remains rough and overlooked today. Guadalupe Park is also underused, suffering from a lack of connectivity to surrounding uses, as well as a relative lack of activity generators.

The Navigation Boulevard median forms a highly visible, continuous green space through the heart of the study area, but it is minimally landscaped and fairly passive. A key part of the Master Plan is to activate Navigation Boulevard as the neighborhood’s “Main Street,” and an enhanced median could be a key part of accomplishing that. Improving the median to accommodate activities that complement the uses on either side would create a pedestrian promenade that would allow for continuous activity along both sides of the street as well as along the center median.

The Master Plan proposes that the median zone could be widened along several blocks to allow for functions such as:

- Expanded outdoor serving areas for any of the nearby restaurants, or possibly even an independent vendor.
- A variety of open spaces that could be used for outdoor performance or passive recreation.
- These same open areas would also be available as areas for temporary stalls for a variety of street festival or farmers market uses.
- Several locations for focal attractions such as fountains, gateway features, or public art.

The enhanced median also functions as a key pedestrian connector, providing for a variety of pathways between the individual attractions along Navigation Boulevard as well as linking several bus stops.

Development incentives. The Master Plan, when implemented, will provide an enhanced public realm and level of amenities that will help to promote infill development in the area.

Additionally, GEEMD is pursuing the creation of a parking district that would allow for an area wide allocation and management of parking spaces. This would facilitate, for instance, the redevelopment of a smaller parcel without having to provide the full complement of required parking, as long as some other accommodation could be made. Part of this solution would also involve the provision of parking on public streets, especially along Navigation Boulevard, where the wide right-of-way allows for the potential for diagonal parking in several locations.

This area is also in the final stages of forming a Tax Increment Reinvestment Zone, which would be able to dedicate a stream of funding derived from future tax increments to assist in redevelopment efforts. Such funds are generally used for such projects as infrastructure and streetscape improvements,

enhanced landscaping, and assisting developers in providing a higher quality of amenities in the public realm adjacent to their developments.

## Street Network and Infrastructure

A key principle of the Master Plan is to establish Navigation Boulevard as the “Main Street” of the East End. A proper Main Street would be lined with a lively mix of uses, building on the existing restaurant destinations to add other retail and neighborhood services, as well as thematic uses such as art galleries and studios. In general, buildings would be located at the front right-of-way line to promote interaction between the pedestrians and the uses. The right-of-way itself would have to support this mix of activities with wide, well-amenitized sidewalks, on-street parking, bicycle facilities, and a number of features of interest to pedestrians. While it should also accommodate vehicular traffic, the needs of vehicles have to be balanced with all of the other functions.

In the City of Houston’s current Major Thoroughfare Plan, Navigation Boulevard is classified as a principal thoroughfare. This designation, however, is primarily concerned with maintaining the roadway as a vehicular traffic route. It is also based on a hierarchical model of traffic flow that concentrates traffic onto a limited number of thoroughfares. Such a model is more appropriate for suburban areas, where the convention is to have a limited number of thoroughfares and collectors, with local streets that do not connect through.

An alternative to the thoroughfare model is the urban street network, where a closely spaced grid of streets allows for traffic to be dispersed among several parallel routes, rather than concentrated on to a single thoroughfare. This model is more appropriate for the East End, and for Navigation Boulevard in particular, due to several factors discussed below. It should be noted that the “Main Street” portion of Navigation Boulevard discussed here is that portion that runs between Jensen Drive and

York Street. Navigation Boulevard between York and Wayside still accommodates truck access to the port and other industrial facilities, and would not be affected by the changes contemplated in the Master Plan.

Navigation between Jensen and York does not behave like a typical suburban thoroughfare for a number of reasons:

1. It’s not really a logical through street. It has a shifted alignment on both ends, requiring a jog from another street (Franklin on the west; it returns to Harrisburg on the east) in order to get on Navigation. In fact, the overall length between these endpoints is only about 4 miles, less than the minimum criterion for a principal thoroughfare.
2. It has a constriction to two lanes as it shifts toward Franklin, passing under the railroad tracks.
3. It has on-street parallel parking on both sides. This is used sporadically, due to the light intensity of use currently along Navigation, but has noticeable peaks (Sundays near Guadalupe Church, for instance.) Ninfa’s uses a portion of their blockface for valet parking drop-off.
4. Many existing buildings have no setback along Navigation. This was, in fact, the norm for the historical development pattern along the street.

The existing Navigation configuration needs to be re-thought. Navigation is currently configured as a divided four lane roadway, with 18-foot wide curbside lanes that allow for parallel parking and a 30-foot wide central median. Recent traffic counts are less than 10,000 vehicles per day, and at no time does it experience anything approaching a congested condition.

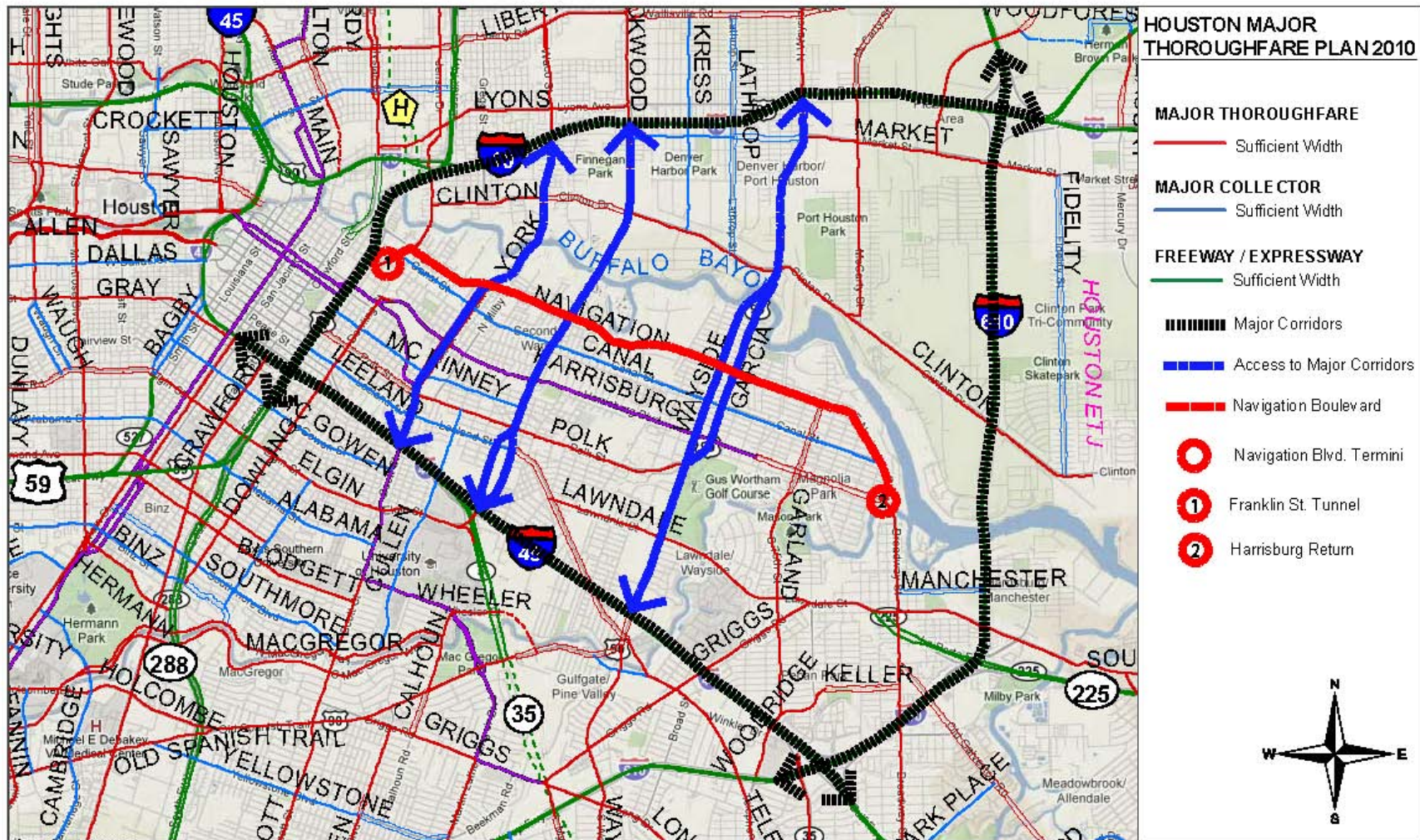


Figure 4: Portion of the Houston Major Thoroughfare Plan – East End



Although the current configuration is not unattractive, it could be much better. At thirty feet the median is wide, but not really wide enough to be usefully programmed. Similarly, the sidewalk zones are adequate but not overly generous for true, active urban life. The inordinately wide roadway encourages the light traffic to move much faster than necessary.

Ideally, the Navigation cross-section could be re-configured to widen the median to a truly occupiable dimension, or to maximized on-street parking to serve adjacent uses. While these would be different cross-sections, they could vary from block to block to respond to neighboring conditions, figures 5 & 6. In any case, maximizing the potential of Navigation for uses other than traffic movement would involve reducing the available capacity to something more in line with current traffic volumes. This, in turn, would be contingent on demonstrating that traffic circulation could be adequately accommodated elsewhere in the neighborhood.

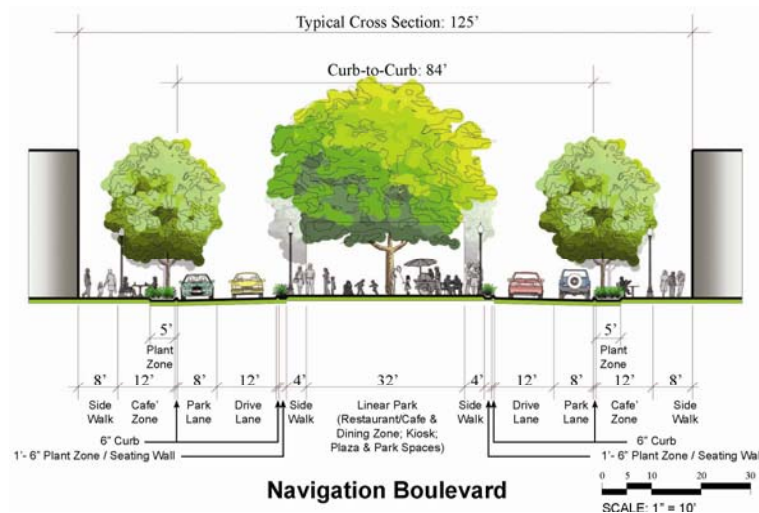


Figure 5: Proposed Navigation street section



Figure 6: Proposed improvements for Navigation Blvd

It's worth noting that with the ongoing construction of the light rail line, Harrisburg has been reduced from a four lane to two lane section. It was anticipated that this would cause some of the normal traffic volume on Harrisburg to divert to nearby parallel routes, particularly during construction. Navigation was identified as one possible alternate route. Anecdotally, there does not seem to have been any noticeable increase in traffic along Navigation. A review of the surrounding thoroughfare network points to some likely reasons:

- Harrisburg is a key access route into downtown. Anyone wanting to go downtown and diverting off Harrisburg is not likely to use Navigation, for the simple reason that it takes one too far north. Canal is actually less of a diversion, but even that is too far north (and also shows little evidence of increased traffic.) Also, both routes still have to go through the constriction under the railroad tracks. Most downtown traffic is likely to shift to the south, along Polk, for instance.
- For anyone trying to access the freeways, any of the north-south routes are more logical. York/Sampson, Lockwood, and Wayside/Macario Garcia are the preferred routes, avoiding Navigation altogether.

While there seems to be little reason to expect significant increases in traffic volume along Navigation in the short term, the magnitude of growth anticipated over the long term may suggest reserving additional capacity. This is the assumption made in the Major Thoroughfare Plan, which projects that Navigation Boulevard would eventually be widened to 6 lanes.

For reasons outlined above, Navigation is not a logical through street. Also, in an infill urbanized model of redevelopment, wide multi-lane thoroughfares are less appropriate than slower speed,

mixed-use and mixed-mode “complete streets,” to use the current terminology.

It bears mentioning that urban street networks should be analyzed as a whole, rather than street by street. Figures 7 and 8 show a diagrammatic comparison of the thoroughfare model and the network model for a prototypical square mile. In each case, the diagram represents a typical module that can be expanded in both directions.



The thoroughfare model represents the prototypical square mile as the area that occurs between principal thoroughfares, which are generally spaced at one mile intervals. Typically (though not always) there is a minor thoroughfare or collector occurring at half-mile intervals. In this diagram, the primary thoroughfares are assumed to be six-lane roads, and the collectors four lanes. There are, of course, a number of local streets occurring between these thoroughfares, but these do not really contribute to the through movement of traffic; in fact, they are usually deliberately designed to discourage through traffic. Thus, this square mile contains 2 miles of six-lane road and 2 miles of four-lane road for a total 20 lane miles of thoroughfare.

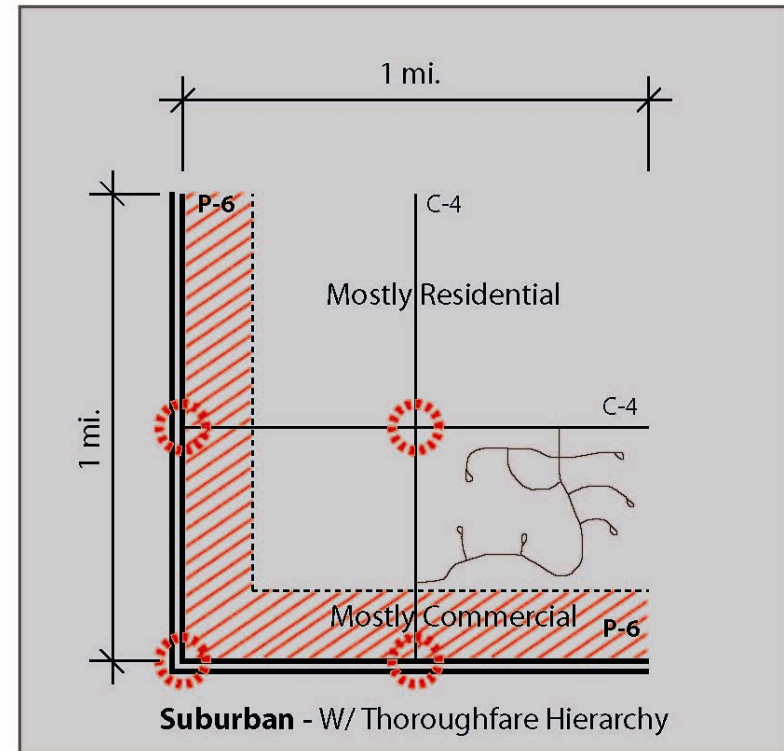


Figure 7: Thoroughfare street network model

The network model, by contrast, divides the prototypical square mile with a grid of streets spaced one tenth of a mile apart. (This is actually an unusually large block size; the downtown Houston grid, for instance, is calibrated at 16 blocks per mile.) The streets at half-mile intervals are assumed to be four lanes, all the rest are two-lane streets. This square mile contains 48 lane miles of through streets, more than double the thoroughfare model.

Aside from providing a greater density of useful streets, the network model has other advantages. Most of the streets will have relatively low traffic volumes, and will be more conducive to pedestrian or bicycle traffic. It provides for a larger choice of routes between any two points, in case, for instance, one wants to avoid an area of street construction, an accident, or a particularly problematic intersection. It can inherently allow for a greater density of development, which, in turn, reduces average distance between destinations, even to the point of making them walkable, if the uses are well integrated.

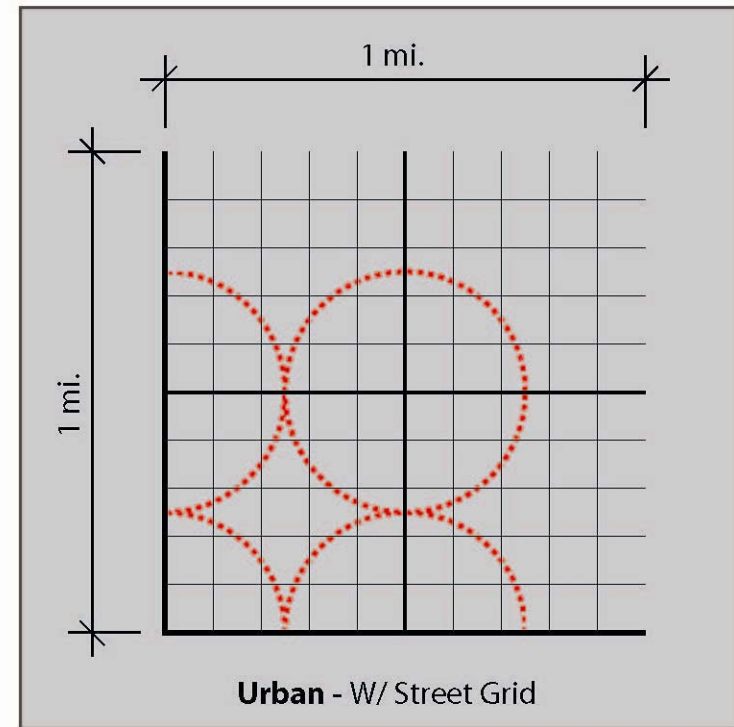


Figure 8: Urban street network model

The East End has a viable street network, but it has been compromised over time by various street closings, block aggregations, and re-alignments. Several at-grade railway crossings have been closed. Although it is an extension of the downtown street grid, major developments such as the Convention Center and the various sports venues have caused a number of the street links to be interrupted. A key focus of the East End Master Plan is to re-open and reinforce the grid

network as much as possible, both to facilitate the movement of traffic and to allow for denser redevelopment.

A comparison of the current street network with the proposed network at eventual build-out demonstrates the street and intersection improvement projects needed to realize the master plan. These are shown in Figures 9 and 10.

A list of specific improvement projects is as follows:

York and Sampson:	Pedestrian/Bike Improvements	Funded, in design
Navigation Boulevard:	Pedestrian/Bike Improvements	Funded, in design
York and Sampson:	Re-pave	Near term priority
Navigation Boulevard:	Odd block improvements	Near term priority
Navigation Boulevard:	Re-pave	Near term priority
Navigation Boulevard:	Wayfinding/Traffic Routing	Near term priority
Navigation/York/Sampson:	Intersection	Near term priority
Trolley Circulator:		Study funded
Bastrop Alignment and Rail Crossing:		Mid term priority
Canal Street Improvements and Roundabout:		Mid term priority
Commerce Street Improvements:		Mid term priority
Jensen/Navigation Intersection:		Mid term priority
Railroad Parallel Street:		Mid term priority
Palmer Street Rail Crossing:		Long term priority
Palmer Green Street and Bayou Bridge:		Long term priority
Neighborhood Street Grid Enhancements:		Public/private
Bayou Pedestrian Bridges:		Public/private



Figure 9: Existing East End street network





Figure 10: Proposed East End street network

## Application for Federal Assistance SF-424

\* 1. Type of Submission:

- ☐ Preapplication  
☒ Application  
☐ Changed/Corrected Application

\* 2. Type of Application:

- ☒ New  
☐ Continuation  
☐ Revision

\* If Revision, select appropriate letter(s):

\* Other (Specify):

\* 3. Date Received:

12/16/2016

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

### State Use Only:

6. Date Received by State:

7. State Application Identifier:

### 8. APPLICANT INFORMATION:

\* a. Legal Name:

HOUSTON, CITY OF

\* b. Employer/Taxpayer Identification Number (EIN/TIN):

74-6001164

\* c. Organizational DUNS:

0242404390000

### d. Address:

\* Street1:

611 Walker St, 25th Floor

Street2:

\* City:

Houston

County/Parish:

\* State:

TX: Texas

Province:

\* Country:

USA: UNITED STATES

\* Zip / Postal Code:

77002-4903

### e. Organizational Unit:

Department Name:

Division Name:

### f. Name and contact information of person to be contacted on matters involving this application:

Prefix:

Ms.

\* First Name:

Jennifer

Middle Name:

\* Last Name:

Clancey

Suffix:

Title:

Brownfields Redevelopment Program Manager

Organizational Affiliation:

\* Telephone Number:

(832) 3949005

Fax Number:

(832) 3948975

\* Email:

jennifer.clancey@houstontx.gov

## Application for Federal Assistance SF-424

### \* 9. Type of Applicant 1: Select Applicant Type:

C: City or Township Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

\* Other (specify):

### \* 10. Name of Federal Agency:

Environmental Protection Agency

### 11. Catalog of Federal Domestic Assistance Number:

66.818

CFDA Title:

Brownfields Assessment and Cleanup Cooperative Agreements

### \* 12. Funding Opportunity Number:

EPA-OLEM-OBLR-16-08

\* Title:

FY17 Guidelines for Brownfields Assessment Grants

### 13. Competition Identification Number:

NONE

Title:

None

### 14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment

Delete Attachment

View Attachment

### \* 15. Descriptive Title of Applicant's Project:

City of Houston Texas FY17 Application for EPA Brownfields Community-Wide Hazardous Substance and Petroleum Assessment Grant

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments



**Application for Federal Assistance SF-424****16. Congressional Districts Of:**

\* a. Applicant TX-029

\* b. Program/Project TX-029

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment

Delete Attachment

View Attachment

**17. Proposed Project:**

\* a. Start Date: 10/01/2017

\* b. End Date: 09/30/2020

**18. Estimated Funding (\$):**

* a. Federal	300,000.00
* b. Applicant	0.00
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	300,000.00

**\* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- ☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .
- ☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- ☒ c. Program is not covered by E.O. 12372.

**\* 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment

Delete Attachment

View Attachment

**21. \*By signing this application, I certify (1) to the statements contained in the list of certifications\*\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\*\* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ \*\* I AGREE

\*\* The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

**Authorized Representative:**

Prefix: Mr. \* First Name: Dale

Middle Name:

\* Last Name: Rudick, P.E.

Suffix:

\* Title: Director, Public Works and Engineering Dept

\* Telephone Number: (832) 395-2500 Fax Number:

\* Email: dale.rudick@houstontx.gov

\* Signature of Authorized Representative: Jennifer M Clancey \* Date Signed: 12/16/2016